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INSTRUCTIONS FOR COMPLETION OF THE ENGINEERING DATA TRANSMITTAL

(USE BLACK INK OR TYPE)

BLOCK	TITLE		
(1)*	EDT	•	Enter the assigned EDT number.
(2)	To: (Receiving Organization)	•	Enter the individual's name, title of the organization, or entity (e.g., Distribution) that the EDT is being transmitted to.
(3)	From: (Orginating Organization)	•	Enter the title of the organization originating and transmitting the EDT.
(4)	Related EDT	•	Enter EDT numbers which relate to the data being transmitted.
(5)*	Project/Program/ Dept//Div	•	Enter the Project/Program/Department/Division title or Project/Program acronym or Project Number. Work Order Number or Organization Code.
(6)	Cognizant/Project Engineer	•	Enter the name of the individual identified as being responsible for coordinating disposition of the EDT.
(7)	Purchase Order No.	•	Enter related Purchase Order (P.O.) Number, if available.
(8)*	Originator Remarks	•	Enter special or additional comments concerning transmittal, or "Key" retrieval words may be entered.
(9)	Equipment/Component No.	•	Enter equipment/component number of affected item, if appropriate.
(10)	System/Bldg./Facility	•	Enter appropriate system pullding on acultify humber, it appropriate
(11)	Receiver Remarks	•	Enter special or additional comments concerning transmittal
(12)	Major Assm. Dwg. No.	•	Enter applicable drawing number of major assembly, if appropriate.
(13)	Permit/Permit Application No.	•	Enter applicable permit or permit application number, if appropriate.
(14)	Required Response Date	•	Enter the date a response is required from individuals identified in Block 17. (Signature/Distribution)
(15)*	Data Transmitted		
	(A)* Item Number	•	Enter sequential number, beginning with 1, of the information listed on EDT.
	(B)* Document/ Drawing No.	•	Enter the unique identification number assigned to the document or drawing being transmitted.
	(C)* Sheet No.	•	Enter the sheet number of the information being transmitted. If no sheet number, leave blank.
	(D)* Rev. No.	•	Enter the revision number of the information being transmitted. If no revision number, leave blank.
	(E) Title or Description of Data Transmitted	•	Enter the title of the document or drawing or a brief description of the subject if no title is identified.
	(F) Impact Level	•	Enter the appropriate Impact Level (Block 15). Use NA for non-engineering documents,
	(G) Reason for submittal	•	Enter the appropriate code to identify the purpose of the data transmittal (see Block 16).
	(H) Originator Disposition	•	Enter the appropriate disposition code (see Block 16).
	(I) Receiver Disposition	•	Enter the appropriate disposition code (see Block 16).
(16)	<u>Key</u>	•	Number codes used in completion of Blocks 15 (G), (H), and (I), and 17 (G), (H) (Signature/Distribution).
(17)	Signature/Distribution		•
	(G) Reason	•	Enter the code of the reason for transmittal (Block 16).
	(H) Disposition	•	Enter the code for the disposition (Block 16).
	(J) Name	•	Enter the signature of the individual completing the Disposition 17(H) and the Transmittal.
	(L) Date	•	Enter date signature is obtained.
	(M) MSIN	•	Enter MSIN. Note: If Distribution Sheet is used, show entire distribution (including that indicated on Page 1 of the EDT) on the Distribution Sheet.
(18)	Signature of EDT (Cit) Originator	•	Enter the signature and date of the individual originating the EDT (entered prior to transmittal to Receiving Organization). If the EDT originator is the Cognizant/Project Engineer, sign both Blocks 17 and 18.
(19)	Authorized Representativé for Receiving Organization	•	Enter the signature and date of the individual identified by the Receiving Organization as authorized to approve disposition of the EDT and acceptance of the data transmitted, as applicable.
(20)*	Cognizant/Project Manager	. • 	Enter the signature and date of the Cognizant/Project Engineer's manager. (This signature is authorization for release.)
(21)	DOE Approval	•	Enter DOE approval (if required) by letter number and indicate DOE action.

^{*}Asterisk denote the required minimum items checked by Engineering Document Control prior to release; these are the minimum release requirements.

SUPPORTING DOCUMENT		1. Tot	al Pages 340
2. Title SUMMARIES OF WELL CONSTRUCTION DATA AND FIELD OBSERVATIONS FOR EXISTING 100 AGGREGATE AREA OPERABLE UNIT RESOURCE PROTECTION WELLS	3. Number WHC-SD-ER-TI-0	06	4. Rev No.
Groundwater well remediation 100 Aggregate Area Operable Unit resource protection wells Environmental restoration 7. Abstract This document summarizes available construction data existing resource protection groundwater wells with Aggregate Area, Hanford Site. Construction data and tabulate pertinent construction data and results of Preliminary recommendations for remediation based on The as-built drawing or "Well Construction and Complete wo of existing drilling records and the results	a and field obsin or associated field observator this data are letion Summary"	code 8 ervation tion suith tions of also p	1243/PH31A ons for the 100 cummaries f the wells. orovided. sed on
8. PURPOSE AND USE OF DOCUMENT - Mis document was prepared for use within the U.S. Department of Energy and its contractors. It is to be used only to perform, direct, or integrate worksider U.S. Department of Energy contracts. This document is not approved for public release until reviewed. PATENT STATUS - This document conv, since it is transmitted in advance of atent clearance, is made available in confidence solely for use in performance of work under contracts with the U.S. Department of Energy. This document is not to be delished nor its contents otherwise disseminated or used for purposes other than specified above before patent approval for such elease or use has been secured, your request, from the U.S. Department of Emergy, Patent Attorney, Richland Operations Office, Richland, WA. DISCLAIMER - This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.	10. Authorized Manager	anager's k lanager's ribution Release STAMP LAS JTION RNAL	Signaturé Limit Limit LIMITS CMLY LIMITED
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INTRODUCTION

This package provides data for groundwater wells included in released 100 Area Remedial Investigation/Feasibility Study Work Plans (DOE-RL 1990a and DOE-RL 1990b). It also includes 100 and 600 Area wells that may become a part of the 100 Area Aggregate Unit. It is the first part of the fitness-for-use evaluation process detailed in Environmental Investigation and Site Characterization Instruction (EII) 6.6, "Resource Protection Well Characterization and Evaluation," (WHC-CM-7-7). Figure 1 depicts the process as applied to each well. All documentation in this process is considered draft or preliminary until final approval of recommendations generated by EII 6.6.

The data consists of a data summary of construction data and field observations for each well and a "Well Construction and Completion Summary" or "as-built" drawing for each well.

The data summary tabulates pertinent drilling data and the results of field inspections and downhole television scans of the wells. Preliminary recommendations based on evaluation of that data are then provided. Recommendations detail required remediation or maintenance to achieve applicable data quality objectives. Documented uses for the wells are extracted from computer data base records of water level measurements and published results of chemical and radionuclide analyses (Jaquish and Bryce 1990).

Digitized scans of field photographs of well sites are provided where available and contrast of the photographs allow acceptable resolution for scanning.

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The as-built drawing is based on review of existing drilling records, the results of field observations, and applicable data contained in <u>Hanford Wells</u> (McGhan 1989).

Preliminary recommendations of incomplete EII 6.6 fitness-for-use evaluations for wells identified for possible use are summarized in Table 1. Results of reviews of existing drilling records for all known groundwater wells located within or associated with the 100 Aggregate Area and available records of field maintenance and observations are tabulated in this section and are summarized in Table 2. Location of the 100 Areas and wells tabulated in this document are given in Figures 2-6.

REFERENCES

McGhan, V. L., 1989, Hanford Wells, PNL-6907, Pacific Northwest Laboratory, Richland, Washington.

Environmental Investigations and Site Characterization Manual, WHC-CM-7-7, Westinghouse Hanford Company, Richland, Washington.

Environmental Investigations Instructions (EII):

EII 1.6, "Records Management."
EII 6.1, "Activity Reports of Field Operations."
EII 6.4, "Groundwater Resource Protection Well Maintenance."
EII 6.6, "Resource Protection Well Characterization and

Evaluation."

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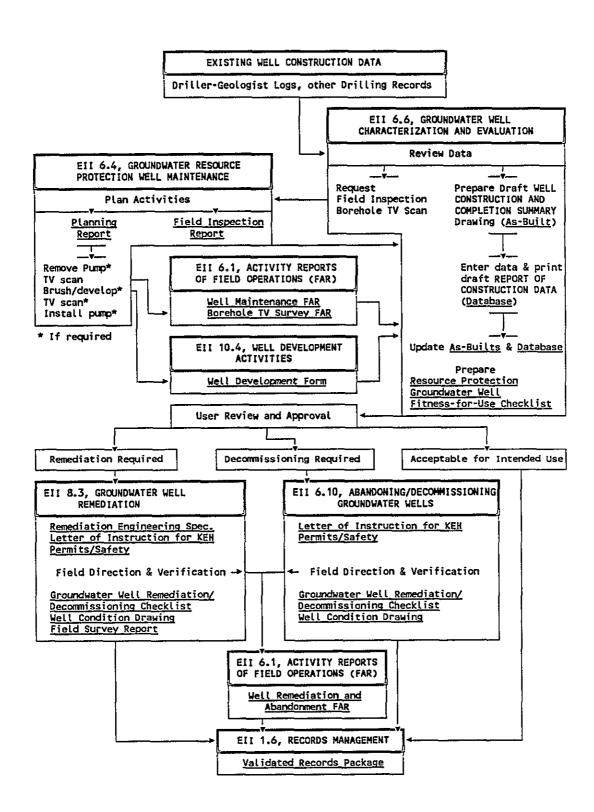
EII 6.10, "Abandoning/Decommissioning Ground Water Wells." EII 8.3, "Groundwater Well Remediation."

DOE-RL, 1990a, CERCLA Remedial Investigation/Feasibility Study Work Plan for the 100-BC-5 Operable Unit, Predecisional, DOE/RL-90-08, U.S. Department of Energy - Richland Operations Office, Richland, Washington.

DOE-RL, 1990b, Remedial Investigation/Feasibility Study Work Plan for the 100-KR-4 Operable Unit, Hanford Site - Richland, Washington, DOE/RL-90-21, U.S. Department of Energy - Richland Operations Office, Richland, Washington.

DOE-RL, 1991, Annual Report for RCRA Groundwater Monitoring Projects at Hanford Site Facilities for 1990, DOE/RL-91-03, Geosciences Group, Westinghous Hanford Company, Richland, Washington.

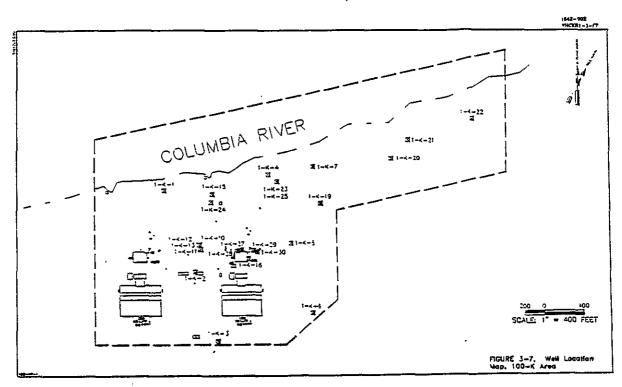
Jaquish, R.E. and R. W. Bryce, Eds., 1990, Hanford Site Environmental Report for Calendar Year 1989, PNL-7346, Pacific Northwest Laboratory, Washington.



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Figure 1. Fitness-for-Use Evaluation Workflow.

Figure 2. Well locations for the 100-B/C Area



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Figure 3a. Well locations for 100-K Area

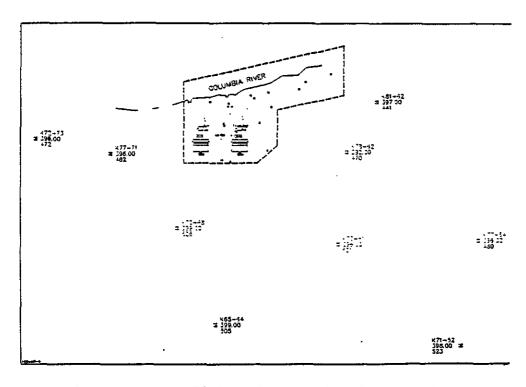
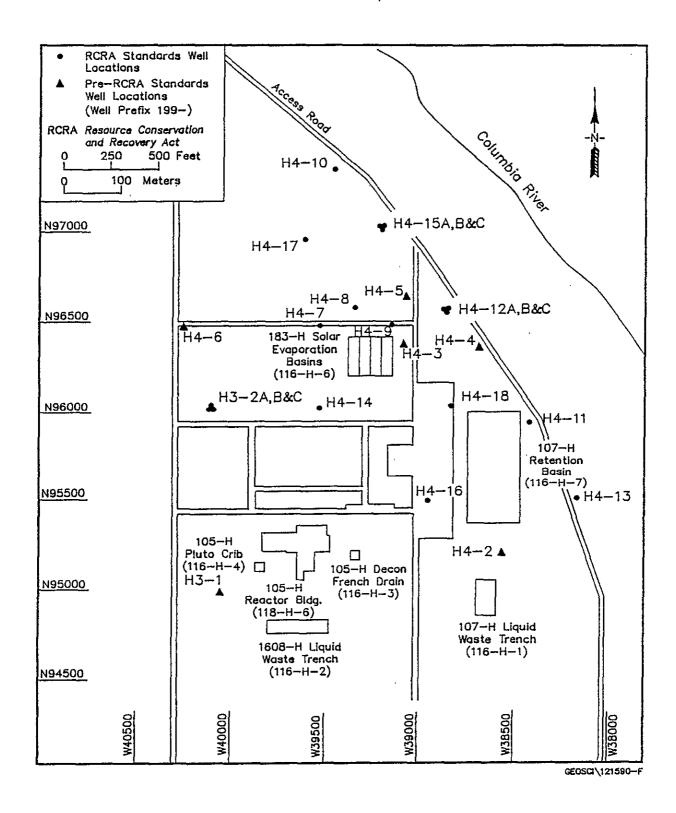


Figure 3b. 600-Area well locations in the vicinity of 100-K Area (Hanford Site well designations are 699- instead of K-)



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Figure 4. Well locations for 100-H Area

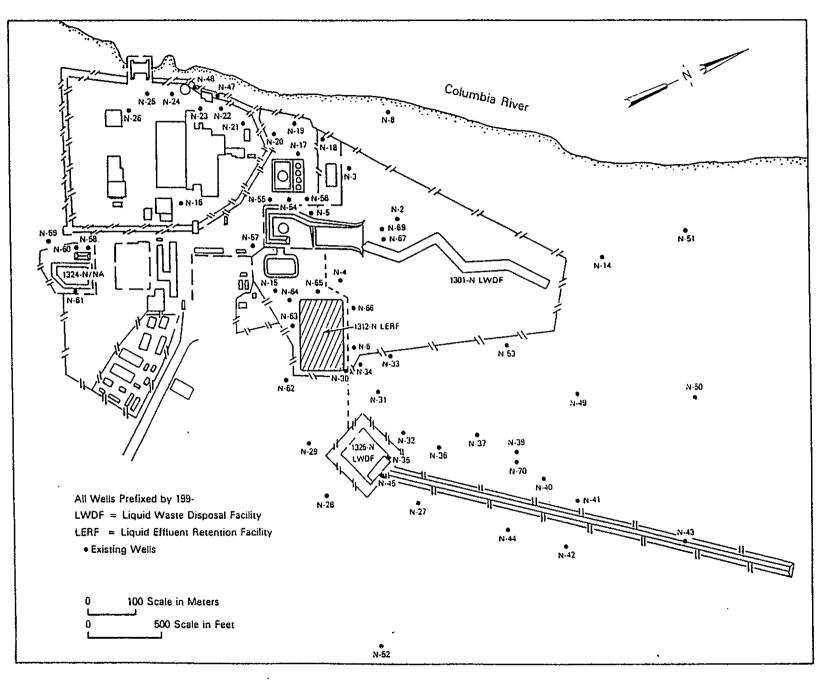


Figure 5. Well locations for 100-N Area

Table 1. Recommended Remediation for 100-Aggregate Area Operable Unit Resource Protection Wells (Sheet 1 Of 3)

Well	Reduce Monitored	Perforate	Install Surface	Install 41416"	Install Posts		
Number	Interval	Casing	Seal	Pad	Paint	Survey	Comments
199-B3-1	No	Но	Yes/0+18-ft	Yes	Yes	Yes	
199-B3-2	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-B4-1	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-в4-2	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-в4-3	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-B4-4	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-85-1	Yes, <30-f		Yes/0+18-ft	Yes	Yes	Yes	
199-B9-1	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-D2-5	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-D5-12	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-08-3	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-F5-1	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-F5-2	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-55-3	No	No	Yes/0+18-ft	Yes	Yes Yes	Yes Yes	
199-F5-4	No	No	Yes/0+18-ft	Yes			Decommission
199-F5-5	No	No No	No	No No	No No	No No	Decommission
199-F5-6	No	No	No			No	Decommission
199-F7-1	No	No	No	No TBD	No TBD	TBD	RCRA compliant
199-F7-2	No	No	No Year (Out 18 - fe				KCKA COMPETATIC
199-F8-1	No	No No	Yes/0+18-ft Yes/0+18-ft	Yes Yes	Yes Yes	Yes Yes	
199-F8-2 199-H3-1	No	No No	•	Yes	Yes	Yes	
	No	No No	Yes/0+18-ft No	No	No	Yes	RCRA compliant
199-H3-2A 199-H3-2B	No No	No	No No	No	No	Yes	RCRA compliant
199-H3-2C	NO No	NO No	No	No	No	Yes	RCRA compliant
199-H4-2	Yes, <30-1		Yes/0+18-ft	TBO	TBĐ	Yes	Install 2-in piezometer?
199-114-2 199-114-3	No	No	Yes/0+18-ft	No	No	Yes	mstatt 2-m prezoneter:
199-H4-4	No	No	No	No	No	Yes	Acceptable for screening
199-14-5	No	No	No	No	No	Yes	Acceptable for screening
199-H4-6	No	No	No	No	No	Yes	Acceptable for screening
199-H4-7	No	No	No	No	No	Yes	RCRA compliant
199-H4-8	No	No	No	No	No	Yes	RCRA compliant
199-H4-9	No	No	No	No	No	Yes	RCRA compliant
199-H4-10	No	No	No	No	No	Yes	RCRA compliant
199-84-11	No	No	No	No	No	Yes	RCRA compliant
199-H4-12A	No	No	No	No	No	Yes	RCRA compliant
199-H4-12B	No	No	No	No	No	Yes	RCRA compliant
199-H4-120	No	No	No	No	'No	Yes	RCRA compliant
199-84-13	No	No	No	No	No	Yes	RCRA compliant
199-H4-14	No	No	No	No	No	Yes	RCRA compliant
199-H4-15A	. No	No	No	No	No	Yes	RCRA compliant
199-H4-15B		No	No	No	No	Yes	RCRA compliant
199-H4-15C	No	No	No	No	No	Yes	RCRA compliant
199-н4-16	No	No	Ко	No	No	Yes	RCRA compliant
199-H4-17	No	Мо	Но	No	No	Yes	RCRA compliant
199-н4-18	No	No	No	No	No	Yes	RCRA compliant
199-K-10	Yes, <30-			Yes	Yes	Yes	
199-K-11	Yes, <30-		Yes/0+18-ft	Yes	Yes	Yes	
199-K-12	No	No	No 10 10 ft	No	No	No	Decommission
199-K-13	Yes, <30-1			Yes	Yes	Yes	• · - · · · · ·
199-K-14	No	No	No	No	No	No	Locate-decommission
199-K-15	No	No	No	No	No	No	Locate-decommission
199-K-16	No	No	No	No	No	No	Locate-decommission
199-K-17	No	No	No Table	No	No	No	Locate-decommission
199-K-18	No	No, remove	Yes/0+12-ft	Yes	Yes	Yes	Install 4 ⁿ SS casing
199-K-19	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-K-20	No	No	Yes/0+18-ft	Yes	Yes	Yes	Da
199-K-21	No	No	No	No	No	No	Decommission
199-K-22	No	No	Yes/0+18-ft	Yes	Yes	Yes	

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Table 1. Recommended Remediation for 100-Aggregate Area Operable Unit Resource Protection Wells (Sheet 2 Of 3)

Well Number	Reduce Monitored Interval	Perforate Casing	Install Surface Seal	Install 41416" Pad	Install Posts Paint	Survey	Comments
199-K-23	No	Но	Yes/0+18-ft	Yes	Yes	Yes	
199-K-24	No	No	No	No	No	No	Locate-decommission
199-K-25	No	No	No	No	No	No	Locate-decommission
199-K-27		No	Yes/0+18-ft	Yes	Yes	Yes	
199-K-28		No	No	Yes	Yes	Yes	
199-K-29		No	No	Yes	Yes	Yes	
199-K-30		No	No	Yes	Yes	Yes	
199-K-31	No	No	No	No	No	No	Locate-decommission
199-N-1	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-N-2	No	No	Yes/0+18-ft	Yes	Yes	Yes	
199-N-3	Yes, <30-ft	No	Yes/0+18-ft	Yes	Yes	Yes	
199-N-4	No	Yes/60+90-ft	Yes/0+18-ft	Yes	Yes	Yes	Remove plug @ 73-ft
199-N-5	Yes, <30-ft	No	Yes/0+18-ft	Yes	Yes	Yes	
199-N-6	No.	Yes/65+70-ft	Yes/0+18-ft	Yes	Yes	Yes	Deepen/decommission?
199-N-7	No	No	No	No	No	No	Decomnissioned
199-N-8P		No.	No	No	No	No	Decommission
199-N-89		No.	No	No	Хо	No	Decommission
199-N-8R		No ·	No	No	No	No	Decommission
199-N-8S		No	No	No	No	No	Decommission
199-N-8T		No	No	No	No	No	Decommission
199-N-8U		No '	No	No	No	No	Decommission
		No 1	No	No	No	No	Decommission
199-N-8V 199-N-12		No	Yes/0+18-ft	Yes	Yes	Yes	-
199-N-14		No	Yes/0+18-ft	Yes	Yes	Yes	
199-N-14		No	Yes/0+18-ft	Yes	Yes	Yes	
		No ,	No	Yes	No	Yes	Acceptable for screening
199-N-16		No	No	Yes	No	Yes	
199-N-17			No	Yes	Yes	Yes	Acceptable for screening
199-N-18		No No	No	Yes	No	Yes	Modelesses (or co. co. co.
199-N-19		No	No	Yes	No	Yes	
199-N-20 199-N-21		No	No	Yes	No	Yes	
199-N-22		No	No	Yes	Yes	Yes	Acceptable for screening
199-N-23		No	No	Yes	TBD	Yes	
199-N-24		No	No	Yes	TBD	Yes	
199-N-25		No	No	Yes	TBO	Yes	Acceptable for screening
199-N-20		No	No	Yes	TBD	Yes	Acceptable for screening
199-N-27		No	No	Yes	No	Yes	Acceptable for screening
		No	No ·	Yes	No	Yes	Acceptable for screening
199-N-28 199-N-29		No	No	Yes	No	Yes	Acceptable for screening
		No	No	Yes	Yes	Yes	Acceptable for screening
199-N-30		No	No	Yes	No	Yes	Acceptable for screening
199-N-31		No	No	Yes	No	Yes	Acceptable for screening
199-N-32		No	No	Yes	No	Yes	Acceptable for screening
199-N-33		No	Yes/0+18-ft	Yes	Yes	Yes	Acceptable for screening
199-N-34		No No	Yes/0+18-ft	Yes	Yes	Yes	Acceptable for screening
199-N-35			Yes/0+18-ft	Yes	No	Yes	Acceptable for screening
199-N-36	_	No	Yes/0+18-ft	Yes	No	Yes	Acceptable for screening
199-N-3		No No	•	No	No	No	Decommissioned/grouted
199-N-38		No	No You (Child-ft	NO Yes	No	Yes	Acceptable for screening
199-N-39		No	Yes/0+18-ft			Yes	Acceptable for screening
199-N-4		No	Yes	Yes	No	Yes	Acceptable for screening
199-N-4		No	Yes/0+18-ft	Yes	No No	Yes	Acceptable for screening
199-N-4	and the second s	No	Yes/0+18-ft	Yes	No No	Yes	Acceptable for screening
199-N-4.		No	Yes/0+18-ft	Yes	No No		undehrance tot servettill
199-N-4		TBD	Yes/0+18-ft	Yes	No	Yes	Acceptable for screening
199-N-4		No	Yes/0+18-ft	Yes	TBD	Yes	Acceptable for screening
199-N-4		No	No	Yes	TBD	Yes	
199-N-4	8 No	No	No	Yes	TBD	Yes	Acceptable for screenin
199-N-4	9 No	No	No	Yes	TBD	Yes	Acceptable for screenin
199-N-5		No	No	Yes	TBD	Yes	Acceptable for screening
199-N-5		No	No	Yes	TBD	Yes	Acceptable for screening
199-N-5	_	No	No	Yes	No	Yes	Acceptable for screening

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Table 1. Recommended Remediation for 100-Aggregate Area Operable Unit Resource Protection Wells (Sheet 3 Of 3)

Well Number	Reduce Monitored Interval	Perforate Casing	Install Surface Seal	Install 4:4:6" Pad	Install Posts Paint	Survey	Comments
199-N-53	No	No	No	Yes	Yes	Yes	Acceptable for screening
199-N-54	No	No	No	No	No	Yes	RCRA compliant
199-N-55	No	No	No	No	No	Yes	RCRA compliant
199-N-56	No	No	No	No	No	Yes	RCRA compliant
199-N-57	No ,	No	No	No	No	Yes	RCRA compliant
199-N-58	No	No	No	No	No	Yes	RCRA compliant
199-N-59	No	No	No	No	No	Yes	RCRA compliant
199-N-60	No	No	No	No	No	Yes	RCRA compliant
199-N-61	No	No	No	No	No	Yes	RCRA compliant
199-N-62	No	No	No	Ko	No	Yes	RCRA compliant
199-N-63	No	No	No	No	No	Yes	RCRA compliant
199-N-64	No	No	No	No	No	Yes	RCRA compliant
199-N-65	No	No	No	No	No	Yes	RCRA compliant
199-N-66	No	No	No	No	No	Yes	RCRA compliant
199-N-67	No	No	No	Ko	No	Yes	RCRA compliant
199-N-69	No	No	No	No	No	Yes	RCRA compliant
199-N-70	No	No	No	No	No	Yes	RCRA compliant
699-63-90	Yes, <30-ft	No	Yes/0+18-ft	Yes	Yes	Yes	•
699-65-72	Yes, <30-ft	Yes/130+137-ft		Yes	Yes	Yes	
699-65-83	No	Yes/80+86-ft	Yes/0+18-ft	Yes	Yes	Yes	
699-66-64	No	No	Yes/0+18-ft	Yes	Yes	Yes	Screen on lead packer
699-66-91	Yes, <30-ft	No	Yes/0+18-ft	Yes	Yes	Yes	·
699-67-86	No	No	Yes/0+18-ft	Yes	Yes	Yes	
699-70-68	No	Yes/120+126-ft		Yes	Yes	Yes	
699-71-77	Yes, <30-ft	No	Yes/0+18-ft	Yes	Yes	Yes	
699-72-73	Yes, <30-ft	No	Yes/0+18-ft	Yes	Yes	Yes	
699-72-88	No.	Yes/25+32-ft	Yes/0+18-ft	Yes	Yes	Yes	
699-72-92	Yes, <30-ft	No.	Yes/0+18-ft	Yes	Yes	Yes	
699-73-61	No	No	Yes/0+18-ft	Yes	Yes	Yes	
699-77-54	Yes, <30-ft	No	Yes/0+18-ft	Yes	Yes	Yes	
699-78-62	No	No	Yes/0+18-ft	Yes	Yes	Yes	
699-81-58	No?	No	Yes/0+18-ft	Yes	Yes	Yes	
699-81-62	No	No	No	Кo	No	No '	Decommission
699-89-35	No	No	Yes/0+18-ft	Yes	Yes	Yes	
699-90-45	No	No	Yes/0+18-ft	Yes	Yes	Yes	
699-96-49	No	No	Yes/0+18-ft	Yes	Yes	Yes	
699-97-43	Yes, <30-ft	No	Yes/0+18-ft	Yes	Yes	Yes	
699-97-51/		No	Yes/0+18-ft	Yes	Yes	Yes	
699-101-4		No	Yes/0+18-ft	Yes	Yes	Yes	

NOTE: Recommendations are preliminary and based on incomplete data. They are made in draft form for planning purposes only.

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Table 2. Tabulation of 100-Aggregate Area Operable Unit Existing Resource Protection Well Status (Sheet 1 Of 3)

Well Number	Hanford North	Coord West	Date Orill	Depth Drill	Depth Bott ₁	Depth Water ₂	Casng Size	Ref Elev	Perfed Intrvl	Screen Intrvl	Comments
199-83-1	71,800	79,830	Mar53	63	55	32/42	8-cs	439.79	20+60	NA	
199-83-2	71,752	78,818	Sep53	790	~650	44/33	8-cs	442.59	635+645	NA	
199-B4-1	70,000	80,650	Feb49	90	89	66/59	8-cs	461.80	50+90	NA	
199-B4-2	69,933	80,672	Feb49	90	83	63/59	6-CS	461.99	62+88	NA	
199-84-3		80,636	Feb49	91	82	63/59	8-CS	461.75	60 +19 0	NA	
199-84-4	68,978	80,367	Sep60	105	91	75/70	8-CS	472.14	49+102	NA	
199-85-1		82,000	Aug62	151	96	68/52	8-cs	455.56	40+148	NA	407 (6
199-B9-1		79,961	Jul52	92*	116*	98/92*	8-cs	478.87*	80+110*	HA	*25-ft csng added
199-D2-5		52,638	Aug60	95	ND	74/70	8-cs	460.87	36+86	NA	
199-05-12		52,546	Aug60	91	ND	78/82	8-cs	469.67	35 +9 0	NA	
199-08-2		53,018	Jun52	76	ND ND	50/42	6-CS	444.61	30+75 35-70	NA NA	
199-08-3		52,205	Jun52	80.		55/64 35/70	6-CS	449.06	35+79 35+43	NA NA	
199-F5-1		28,255	Sep48	67	ND	35/30	6-CS	406.56 413.02	35+63 25+100	NA NA	
199-F5-2		28,828	Feb53	100	ND	34/ND	8-CS		22++90	NA	
199-F5-3	79,588	28,498	Jan53	90	ND	37/32	8-CS 8-CS	408.62 412.12	35+105	NA NA	
199-F5-4		30,650	Feb53	115	ND	35/42	8-CS	412.51	15+100	NA NA	
199-F5-5		29,174	Jan53	100	ND	16/ND 36/42	8-CS	412.95	35+74	NA.	
199-F5-6		29,402	Aug56	192	ND		8-CS	389.74	10+140	NA	Perf not continous
199-F7-1		33,394	Aug56	150	ND	13/15	6-55	ND	NA	15+30	reit not continue
199-F7-2	ND	ND	Mar88	31	ND	20/ND 15/35	8-CS	405.86	13+53	NA	
199-F8-1		31,265	Aug60	57	ND	15/38	8-CS	410.74	10+53	NA	
199-F8-2		31,138	Aug60	55 76	ND ND	38/41	8-CS	421.98	29+74	NA.	
199-H3-1		40,052	Aug60	75 54		41/38	6-SS	417.83	NA NA	36+51	
199-H3-2A		40,117	Nov86	56	ND		6-SS	418.42	NA.	50+55	
199-H3-2B		40,104	Nov86	58	ND	41/38 41/38	6-SS	418.22	NA NA	100+11	in
199-H3-2C		40,092	Nov86	155	ND ND	#/4	6-CS	421.12	NA.	NA.	#=Artesian
199-84-2		38,565	May52	386 55	D GM	39/42	6-CS	420.35	34+55	NA	#-// testail
199-H4-3		39,080	May74 Jun83	55 55	ND	36/36	6-CS	413.76	NA NA	33~43	Telescoping screen
199-H4-4	90,370	38,685		60	ND	36/38	6-CS	416.26	NA	32*42	Telescoping screen
199-H4-5 199-H4-6	90,037	39,065 40,245	May83 May83	55	ND	41/40	6-CS	419.58	NA	39+49	Telescoping screen
199-84-7	96.479	39,526	Sep86	55	ND	43/41	6-55	420.59	NA	38++53	• -
199-н4-8		39,341	May86	55	ND	44/41	6-SS	420.00	NA	38+48	
199-H4-9		39,136	Sep86	51	ND	43/41	6-SS	418.08	NA	36+46	
199-H4-10		39,449	Sep86	38	ND	28/26	6-55	404.44	NA	23+38	
199-H4-11		38,419	0ct86	53	ND	42/39	6-\$\$	416.84	NA	38+53	
199-114-124			Nov86	48	NO	38/35	6-ss	413.50	NA	33+48	
199-84-128			Nov86	51	ND	37/35	6-55	413.52	NA	45↔50	
199-H4-120			0ct86	220	ND	38/32	6-88	413.52	NA.	72+82	
199-H4-13		38,166	Nov86	61	ND	42/41	6-88	418.20	NA	37+52	
199-H4-14		39,529	Dec86	53	ND	43/40	6-\$\$	420.59	NA	38+53	
199-H4-15A			Nov86	46	NO	33/29	6-ss	407.21	NA	27+42	
199-84-158			Nov86	44	NO	30/29	6-55	406.92	NA	37+42	
199-84-150			0ct86	330	ND	ND/339	2-55	407.449			es 4 piezometers
199-H4-16		38,945	Apr87	61	ND	48/44	6-55	424.23	NA	42+57	
199-H4-17		39,607	May87	46.	.5 ND	42/40	6-55	419.09	NA	35+45	
199-84-18		3,825	May87	51	ND	45/43	6-55	421.82	NA	40+50	
199-K-10	76,100	68,800	Aug52	170	ND	74/70	12-CS	466.66	155+165	NA	
199-K-11	76,030	68,733	Aug52	170	127	73/69	6-CS	467.66	69+160	NA	A
199-K-12	76,104	68,803	Sep52	159	ND	74/ND	6-CS	466.553		NA	Covered ovr-no FI
199-K-13		68,803	Mar53	159	134	55/68	12-CS	464.00	ND	NA	No drill records
199-K-14	ND	שא	Dec52	95	ND	79/ND	8-cs		ND	NA	No FIR-location N
199-K-15		69,050		150	ND	ND/ND	6-cs		ND	NA	No FIR-not locate
199-K-16		68,800		50	ND	ND/ND	8-cs		ND TE	NA	No FIR-not locate
199-K-17	ND	ND	Sep53	75	ND	62/ND	8-cs	406.00	50+75	NA	No FIR-Location N
199-K-18	ND	ND	Oct54	60	39	52/16	8-cs	410.66	ND	NA	

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Table 2. Tabulation of 100-Aggregate Area Operable Unit Existing Resource Protection Well Status (Sheet 2 Of 3)

Well Number	Hanford Coor North West		• • • •	Depth Bott ₁	Depth Water ₂	Casng Size	Ref Elev	Perfed Intrvl	Screen Intrvl	Comments
199-K-19	78,000 67,00	0 Apr55	51	47	31/29	8-cs	422.17	10+50	26+46	
199-K-20	79,500 66,12	5 May55	50	47	30/30	8-cs	422.57	10++50	NA	i
199-K-21	80,000 66,00	00 May55	50	ND	28/11	8-cs	421.73	10+50	NA	
199-K-22	81,000 65,00		50	50	6/33	8-cs	421.68	10+50	29+49	
199-K-23	78,000 68,00	10 Feb56	80	77	74/71	8-cs	405.00	65+80	NA	N= 570 1
199-K-24	77,000 69,00	0 Dec52	50	ND	ND/ND	8-cs	467.00	ND	NA	No FIR-not located
199-K-25	78,000 68,00		76	DK	61/ND	8-CS	473.00	50 + 75	NA	No FIR-not located
199-K-27	76,400 68,00		90	ND	70/69	6-cs	465.00	65+85	NA	
199-K-28	76,350 68,00		90	ND	74/68	6-CS	465.00	63+88	HA	
199-K-29	76,500 67,7		90	ND	74/69	6-CS	465.00	65+85	NA 4797	
199-K-30	76,500 67,70		90	ND	70/68	6-cs	465.00	NA	67+87 30+50	No EIR-Location NO
199-K-31	ND ND	May86	50	NO	26/ND	6-CS	ND	None		No FIR-location NO
199-N-1	86,157 60,59		100	ND	49/54	8-CS	456.10	34+95	NA NA	
199-N-2	86,577 60,3		125	ND	60/71	8-C\$	459.13	35+120	NA NA	
199-N-3	86,365 60,8		125	ND	63/69	8-CS	459.45	34++95 50++60	NA NA	
199-N-4	85,921 60,0		150	ND	52/67	8-C\$	458.73	34+120	NA NA	
199-N-5	85,973 60,5		125	ND	49/55	8-C\$	455.47 460.97	35+65	NA NA	
199-N-6	85,925 59,5		71	ND	60/69	8-CS		NA NA	NA.	Abandoned
199-N-7	85,634 59,6		68	0	54/62	None	NA	NA NA	90+100	
199-N-8P	86,790 60,7			ND	16/13		405.12	NA NA	50+60	
199-N-8Q	86,804 60,7			ND	19/19		404.62	NA NA	37+47	
199-N-8R	86,810 60,7			ND	16/18 16/17		404.57	NA NA	28+38	
199-N-8S	86,790 60,7			ND ND	14/ND		404.61	NA.	20+30	
199-N-8T	86,784 60,8			ND	14/ND		404.59	NA	18+20	
199-N-8U	86,816 60,7			ND	Dry		404.61	NA	5+15	
199-N-8V	86,776 60,8			NO.	46/ND		457.38			68+70 piezometers
199-N-12	86,218 60,3	74 Dec66		ND	51/56	6-CS	445.70	45+78	NA	OG TO PIOSOMOTOLO
199-N-14	87,834 59,5		2.2	ND	58/58	8-cs	456.94	50+78	NA	
199-N-15	N6,659 N5,5		80	ND	58/64	8-cs	456.70	12+78	52+78	Telescoping screen
199-N-16 199-N-17	N6,087 N6,1 N6,902 N6,5				63/70	8-CS	461.20	12+83	NA	
199-N-18	N7,000 N6,6			ND	58/68	8-cs	458.28	12+78	58+79	Telescoping screer
199-N-19	N6,783 N6,7			ND	ND/64	8-C\$	453.90	12+78	NA	
199-N-20	N6,646 N6,6	· - -		ND	62/65	8-cs	455.90	12+78	NA	
199-N-21	N6,522 N6,7			5 ND	60/66	8-cs	457.00	12++78	NA	
199-N-22	N6,340 N6,7			ND	62/ND	8-cs	457.10	12++77	58+80	Telescoping screer
199-N-23	N6,232 N6,7			ND	58/69	8-cs	456.30	12+78	NA	
199-N-24	N6,049 N6,8			ND	34/41	8-cs	432.50	12+54	NA	
199-N-25	N5,923 N6,9			ND	36/39	8-CS	428.50	12+47	28+48	Telescoping screen
199-N-26	N5,705 N6,7			5 NO	63/39	8-cs	455.80	12+77	61+82	Telescoping screen
199-N-27	N7,728 N4,1			NĐ	49/57	8-cs	449.08	NA	32+69	Casing pulled back
199-N-28	N7,050 N4,1			ND	63/75	8-cs	464.24	HA	47↔83	Casing pulled back
199-N-29	N6,943 N4,5			ND	64/75	8-cs	465.25	RA	48+84	Casing pulled back
199-N-30	N6,469 N5,5			ND	58/60	8-C\$	459.90	NA.	42+78	Casing pulled back
199-N-31	N7,489 N4,8		81	ND	61/73	8-cs	462.63	NA	44+81	Casing pulled back
199-N-32	N7,690 N4,6		08	ND		8-cs	462.08	NA	44+80	Casing pulled back
199-N-33	N7,557 N5,1			ND		8-cs	459.87	MA	38+75	Casing pulled back
199-N-34	N7,309 N5,0			ND		8-cs	459.63	NA	34+78	Casing pulled back
199-N-35	N7,485 N4,3			ND		6-cs	449.38	NA.	44+64 5171	Casing pulled back
199-N-36	N7,879 N4,4			NO			458.97	NA	54+74 54-74	Casing pulled back
199-N-37	N8,138 N4,5			ND		8-cs	456.12	NA	54 +7 4	Casing pulled bac
199-N-38	N8,071 N4,1			0	55/ND	None	NA	NA	NA 6777	Abandoned-grouted
199-N-39	N8,388 N4,4	31 Apr84		ND	*		454.31	NA	53+73	Casing pulled back
199-N-40	N8,585 N4,2			ND		8-cs	456.35 457.59	NA NA	53+73 53+73	Casing pulled bac Casing pulled bac
199-N-41	N8,816 N4,1	00 Apr84	78	ND	58/67	8-C\$	/s/ 50	N.A.	~~~/	Lasing Dolled Dac

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Table 2. Tabulation of 100-Aggregate Area Operable Unit Existing Resource Protection Well Status (Sheet 3 Of 3)

Well Number	Hanford North	Coord West	Date Drill	Depth Drill	Depth Bott ₁	Depth Water ₂	Casng Size	Ref Elev	Perfed Intrvl	Screen Intrvl	Comments
199-N-42	N8,746	N3,774	Арг84	78	ND	58/64	8-cs	455.14	NA	ND	Casing pulled back
199-N-43	N9.579	N3,766	Apr84	80	ND	58/62	8-cs	449.01	NA	51+71	Casing pulled back
199-N-44	N8,329	N3,901	Apr84	85	ND	62/69	8-cs	460.70	ND	ND	
199-N-45	N7,474	N4,273	Apr84	73	ND	53/51	8-CS	452.31	NA	51+71	Casing pulled back
199-N-47	ND	ND	Nov84	73	ND	54/ND	8-CS	443.53	NA	53 +7 3	Casing pulled back
199-N-48	ND	ND	Nov84	73	ND	ND/ND	8-C\$	439.79	NA	51+71	Casing pulled back
199-N-49	ND	ND	Jul85	65	ND	ND/62	8-C\$	450.72	NA	55+65	Casing pulled back?
199-N-50	ND	ND	Jul85	86	ND	76/77	8-CS	453.36	NA	66486	Casing pulled back
199-N-51	ND	ND	Jul85	86	ND	75/76	8-C\$	462.18	NA	66+86	Casing pulled back
199-N-52	ND	ND	Jul85	76	ND	65/71	8-cs	463.70	HA	56+76	Casing pulled back
199-N-53	ND	ND	Jun85	74	ND	61/68	8-cs	461.76	NA	51 +7 1	Casing pulled back
199-N-54	N6,772		Jun87	73	NO	60/64	6-SS	457.51	NA	58+73	
199-N-55	N6,687		Jun87	75	ND	60/66	6-55	457.85	NA	58+73	
199-N-56	N6.998		Jun87	74	ND	61/66	6-55	458.09	NA	59474	
199-N-57	N6.558		Jun87	76	ND	60/65	6-55	457.76	NA	58+73	
199-N-58		N5,867	Nov87	71	ND	59/69	6-55	462.88	NA.	55+70	
199-N-59		N5,858	Nov87	72.		59/67	6-55	459.53	NA	56~72	
199-N-60		N5,867	Nov87	72	ND	60/68	6-55	461.94	NA	55↔70	
			Nov87	67		55/68	6-55	462.02	NA.	52+67	
199-N-61		N5,570	Oct87	78.		66/71	6-55	463.59	NA	64+78	
199-N-62		NS,565		81	ND	70/76	6-55	466.70	NA	66+81	
199-N-63	N6,833		Nov87	69.		58/62	6-SS	454.63	NA	54+69	
199-N-64		N4,981	Nov87				6-SS	456.44	NA.	56+71	
199-N-65		N4,892	Nov87	71 80	ND	59/63 68/74	6-SS	465.25	NA NA	63+78	
199-N-66		N5,040	Nov87		ND			458.46	NA NA	60+76	
199-N-67		N5,970	Mar88	79	ND	65/68	6-\$\$	458.84	NA NA	90+10	n
199-N-69		N6,008	Jun88	104	ND	68/69	6-\$\$			89++99	•
199-N-70		N4,414	Jun88	104.		59/63	6-SS	454.21	NA OFw167		
699-63-90		90,264	Dec48	253	164	114/107		509.73	95+147	NA	
699-65-72		72,156	ND	. 216	171	ND/138		540.28 485.63	137+157 60+120	NA NA	
699-65-83		82,961	Apr67	121	115	81/82 102/102	6-CS 6-CS	505.92	NA		6 Casing pulled back
699-66-64		64,249	Jun72	118 190	119 182	102/63	6-CS	467.75	None	NA.	Casing to 798-ft
699-66-91		90,879	May73 Oct62	467	99	71/70	8-cs	472.39	60+460	NA	
699-67-86		85,997		149	145	126/124	_	526.21	126+147	NA	
699-70-68		68,357	Jul54	300	123	67/71	8-CS	472.28	60+288	NA	
699-71-77		76,997	Sepó2	200	135	80/81	8-CS	482.57	60+176	NA.	
699-72-73	72,038	73,222	Sep61	200 52	51	ND/32	8-CS	437.37	33+48	NA	
699-72-88		87,500	ND				8-CS	452.22	44+195	NA NA	
699-72-92		91,963	Sep61	200	89	60/47		531.53	107+146	95+13	52
699-73-61		60,527	Sep62	150	146	127/130	8-CS	480.59	70+120	NA NA	J.
699-77-54		54,100	May57	150	116	80/82				67+10	7
699-78-62		62,300	May57	152	106	63/72	8-CS	469.88	70+120 35+148	NA	•
699-81-58		57,993	Sep62	150	ND	47/43	8-CS	439.55		NA NA	BH-17 corehole
699-81-62		62,072	Mar73	1,471	ND	44/28		307 44	None		Pu-11 constitute
699-89-35		35,221	Sep61	75	ND	27/26	8-CS	397.46	20+73	NA 72442	Talescening comes
699-90-45		45,276	ND	42	ND	38/37	6-CS	422.15	37+42	32+42	
699-96-49	96,388	49,232	0ct62	100	ND	40/34	8-CS	419.29	28+96		on 1½-in piezomete
699-97-43		43,241	0ct62	100	ND	42/39	8-cs	421.01	25+97	HA	
699-97-51/	A 97,238	50,507	ND	~40	ND	21/17	8-cs	402.49	12+39	HA.	
699-101-48	BB 101,4	65 47,8	84 May43	48	NĐ	7/6	6-cs	390.15	ND	43+47	Telescoping scree

NOTES:

- 1) Depth to bottom as verified by field measurement or television log
- rounded to nearest ft.

 2) Depth to water encountered during drilling/latest available measurement rounded to the nearest ft.
- 3) ND = not documented

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SUMMARIES OF CONSTRUCTION AND COMPLETION DATA AND FIELD OBSERVATIONS FOR 100-BC-5 AND 100-KR-4 OPERABLE UNITS RESOURCE PROTECTION WELLS

WELL CONSTRUCTION AND COMPLETION SUMMARY DRAWINGS

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Well Construction and Completion Summary drawings are produced using the Linedraw function of Wordperfect 5.1. The drawings are intended to emphasize the construction aspects of the wells that would affect fitness-for-use. No attempt has been made to maintain scale except in a general way.

Drilled depths and generalized stratigraphy are from driller or geologist logs and are given as related to ground surface at the time of drilling. Logs have been summarized but reflect the wording of the originator as much as possible.

Hole diameters are often noted as "nominal" (nom). Diameters are estimated based on documented casing inner diameter. For example 6 inch casing with a shoe whould have an outer diameter of almost 7 inches.

Survey data provided is obtained from <u>Hanford Wells</u>. Much of the data is estimated from topographic maps. Typically, such estimates are indicated by rounding of horizontal coordinates to the nearest 1,000 or 500 ft and elevations to the nearest 5 ft with no significant decimal footage given.

Washington State coordinates, where no significant decimals are given are conversions from the Hanford Coordinate System using the conversion formula: $N_r = 405,302.04 - W_H \sin\theta + N_H \cos\theta$

a: $N_L = 405,302.04 - W_H \sin\theta + N_H \cos\theta$ $E_L = 2,295,325.01 - W_H \cos\theta - N_H \sin\theta$

where: $\theta = 0^{\circ} - 8 \text{ min} - 49.577 \text{ sec}$ $N_{H} = \text{northing on Hanford Plant grid}$ $W_{H} = \text{westing on Hanford plant grid}$ $N_{L} = \text{northing on Washington State grid}$

 E_L = easting on Washington State grid

SUMMARIES OF CONSTRUCTION DATA AND FIELD OBSERVATIONS

Construction data tabulated is from driller or geologist logs. Field observations are summarized from Activity Reports of Field Operations and Field Inspection Reports in applicable borehole files (EII 6.4). Abbreviations used are NA for not applicable and ND, not documented.

Depth to water lists the depth below ground surface (GS) encountered during drilling and the latest available measurement. Television survey depths are indicated as TV. Measured depth is always the latest available direct measurement to bottom of the borehole.

Results of television scans are summarized. The Well Construction and Completion Summary drawing has not been changed to reflect observed versus recorded differences in depth, especially for perforated or screened sections. However, such differences are noted, where significant.

Data presented in LISTED USE is intended to illustrate past or continuing use of the well. It does not attempt to present all latest sampling or measurement dates or necessarily reflect all data quality objectives.

	WELL CONSTRUCTION AND	COMPLETION SUMMARY	
Drilling Method: Cable tool Drilling Fluid Used: Water Driller's Name: Gentz Drilling Company: Not documented Date Started: 13Mar53	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documented Date Complete: 19Mar53	WELL TEMPORARY NUMBER: 199-83-1 WELL NO: 107-8 Hanford Coordinates: N/S N 71,800 E/W W 79, State Coordinates: N 476,897 E 2,215, Start Card #:Not documented T R S Elevation Ground surface (ft): 438.8 Estimated	830 <u></u>
Depth to water: 32-ft Mari (Ground surface) 42.5-ft June 1	ILT ULDERS Brse GRAVEL AVEL SAND GRAVEL	Type of riser pipe: Carbon steel Diameter of borehole: Type of filler: Not documented Depth top of perforations: Description of perforations: 20*35-ft, 3 holes every 2-ft 35*60-ft, 1 hole every 3-ft Depth to bottom, 55.3-ft 30Jul91 Depth bottom of perforations: [60]	<u>0-ft</u>]
Drawing By: RKL/1#83#01.ASB Reference: HANFORD WELLS	Date:		

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-B3-1

199-B3-1 WELL DESIGNATION 100-BC-5 CERCLA UNIT RCRA FACILITY NA

HANFORD COORDINATES : 71,800 W 79,830 N N 476,897 E 2,215,311 LAMBERT COORDINATES :

DATE DRILLED Mar53 63-ft DEPTH DRILLED (GS) :

55.3-ft, 30Jul91 MEASURED DEPTH (GS) :

32-ft, Mar53; 42.5-ft, 30Jul91 8-in, from +1.0+63-ft DEPTH TO WATER (GS) :

CASING DIAMETER

439.79-ft ELEV TOP CASING

438.8-ft estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : 20+60-ft

SCREENED INTERVAL NA

FIELD INSPECTION, 25Feb91, COMMENTS

Carbon steel, pump hanger holes, no pad, no posts, capped, and locked. No permanent identification.

Located in underground radiation zone.

OTHER: Driller AVAILABLE LOGS

07Jun91, depths referenced to ground surface; TV SCAN COMMENTS

Depth to bottom: 50.8-ft, silty Depth to water: 38.7-ft, floating debris. Water clear with some dislodged scale

and suspended debris.

Vadose casing clean; submerged casing, some light corrosion/scale/rust, not extremely dirty. Perforations not visible. The casing will need cleaning.

24Jul91,

Depth to bottom: 45.8-ft, Depth to water: 41.7-ft, floating debris. Vadose casing clean, submerged casing clean. Perforations not determined. There wasn't anything that looked like a perforation. There were some spots

that might have been.

DATE EVALUATED

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EVAL RECOMMENDATION :

LISTED USE

B overflow trench_EMA 1851, Sampled 1989 for ³H, U, ⁹Sr, NO₃, Cr; water levels measured 26May59+01Mar90 Electric submersible, intake at 53.35-ft (TOC). 03Jump1; Pulled pump, no contamination encountered. PUMP TYPE MAINTENANCE

07Jun91; TV run. 11Jun91; Brushed casing and bailed debris with sand pump. Much sand coming in

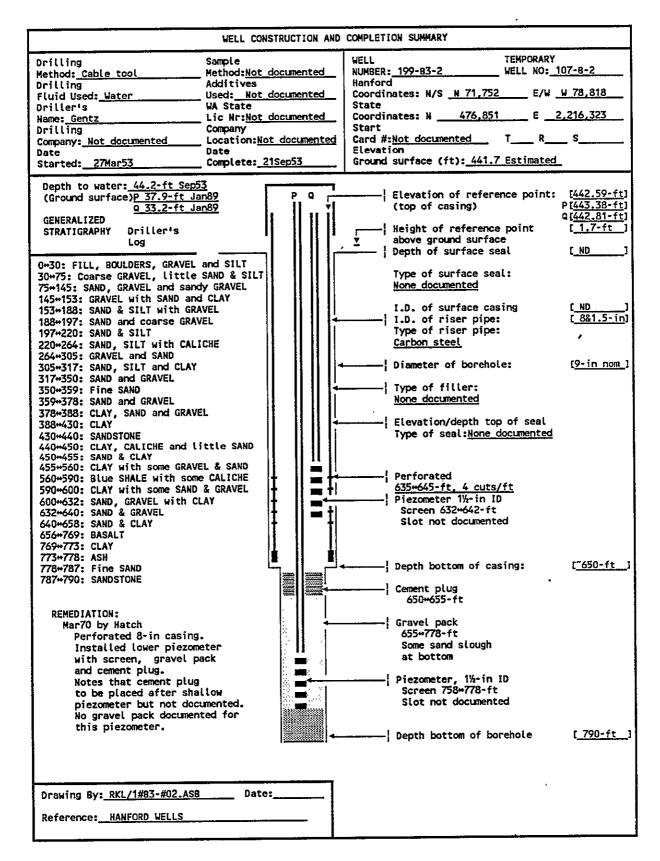
during bailing.

10Jul91; Developed well by pumping to <5 NTU.

24Jul91; TV run.

30Jul91; Installed electric submersible pump.

Depth-to-water, 43.5-ft; depth-to-bottom, 56.3-ft (TOC).



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCES PROTECTION WELL - 199-B3-2

WELL DESIGNATION 199-B3-2 CERCLA UNIT 100-BC-5

RCRA FACILITY NA

HANFORD COORDINATES : N 71,752 W 78,818 N 476,851 E 2,216,323 Mar-Sep53 LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : 790-ft MEASURED DEPTH (GS) : 768-ft, Date ND 44.2-ft, Sep53 P 37.9-ft, Jan89 DEPTH TO WATER (GS) :

Q 33.2-ft, Jan89 8-in, from +1.7+650-ft 442.59-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 441.7-ft Estimated

PERFORATED INTERVAL : 635+645-ft SCREENED INTERVAL Q = 632+642-ftP = 758+778-ft

FIELD INSPECTION, 25Feb91, COMMENTS

Carbon steel, no pad, no posts, capped, and locked. No permanent identification.

Not in radiation zone.

OTHER: Contains two 11/2-in piezometers; 1-83-2P and 1-83-2Q

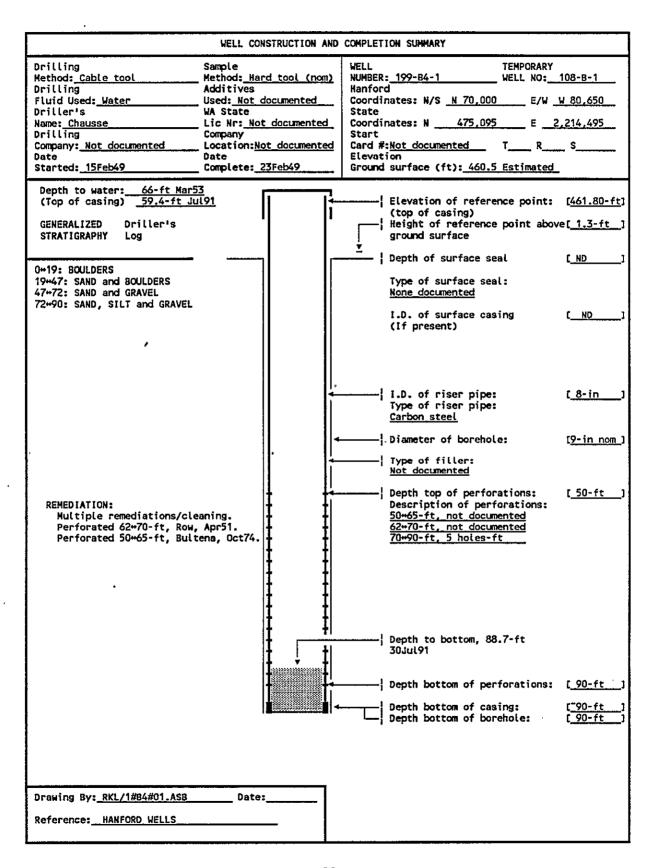
Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE

C overflow trench, EMA 1852, 1856 & 1857, not sampled 1989; Water Levels measured 26May59+01Feb91; B3-2P 26May59+15Mar91; B3-2Q 13Jun84+24Jan90

PUMP TYPE None MAINTENANCE NA

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCES PROTECTION WELL - 199-B4-1

199-B4-1 WELL DESIGNATION CERCLA UNIT 100-BC-5

RCRA FACILITY NA

N 70,000 W 80,650 HANFORD COORDINATES : N 475,095 E 2,214,495 LAMBERT COORDINATES :

DATE DRILLED Feb49 DEPTH DRILLED (GS) : 90-ft

MEASURED DEPTH (GS) : 88.7-ft, 30Jul91

DEPTH TO WATER (GS) :

66-ft, Mar53; 59.4-ft, 30Jul91 8-in, from +1.3+90-ft 441.80-ft CASING DIAMETER

ELEV TOP CASING ELEV GROUND SURFACE : 460.5-ft Estimated

50+90-ft PERFORATED INTERVAL :

SCREENED INTERVAL NA

COMMENTS

FIELD INSPECTION, 25Feb91, Carbon steel, pump hanger holes, no pad, no posts, capped, and locked.

No permanent identification. Not in radiation zone.

OTHER:

Driller AVAILABLE LOGS

TV SCAN COMMENTS 07Jun91, depths referenced to ground surface;

Depth to bottom: 80.4-ft, silty.

Depth to water: 59.0-ft, some floating debris. Water clear with some

dislodged scale and suspended debris.

Vadose casing clean; submerged casing fairly dirty with corrosion/scale/rust. Perforations start at 47.9-ft-not determined. The well will have to be cleaned.

24Jul91,

Depth to bottom: 95.1-ft, sand and some gravel.

Depth to water: 59.4-ft, some floating debris. Water clear.

Vadose casing clean, submerged casing clean.

Perforations from 48.2-ft-not determined, 4 cuts/rd/ft, open and clean.

Most of the perforations below water were visible.

DATE EVALUATED

EVAL RECOMMENDATION:

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LISTED USE

108-B crib, sampled 1989 for ³H, U, ⁹⁰Sr, NO₃, Cr; water levels measured 13Jul65+18Jun90 Electric submersible, intake at 69.05-ft (TOC). PUMP TYPE

MAINTENANCE 28May91; Pulled pump. No contamination encountered. 07Jun91; TV run.

12Jun91; Brushed casing, sand pumped and bailed to construction depth.

11Jul91; Developed well by pumping to <5 NTU. 24Jul91; TV run.

30Jul91; Installed pump. Depth-to-water, 60.8-ft; depth-to-bottom, 90.0-ft (TOC).

	WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Fluid Used: Water Driller's Name: Rodda Drilling Company: Not documented Date	Sample Method: <u>Hard tool (nom)</u> Additives Used: <u>Not documented</u> WA State Lic Nr: <u>Not documented</u> Company Location: <u>Not documented</u> Date Complete: <u>28Feb49</u>	WELL TEMPORARY NUMBER: 199-B4-2 WELL NO: 108-B-2 Hanford Coordinates: N/S N 69,933 E/W W 80,672 State Coordinates: N 475,028 E 2,214,474 Start Card #:Not documented T R S Elevation Ground surface (ft): 461.0 Estimated
(Ground surface)59.7-ft Jun91 GENERALIZED Driller's STRATIGRAPHY Log 0+15: SAND, GRAVEL, SILT and E	OULDERS	Elevation of reference point: [461.99-ft] (top of casing) Height of reference point above[1.0-ft] ground surface Depth of surface seal [ND] Type of surface seal:
15+18: SAND, GRAVEL and BOULDE 18+20: BOULDER 20+21: SAND, GRAVEL and BOULDE 21+25: SAND and GRAVEL 25+27: SAND, GRAVEL and SILT 27+50: SAND and GRAVEL 50+55: SAND, GRAVEL and BOULDE 55+59: SAND and GRAVEL 59+60: SAND, GRAVEL and BOULDE 60+70: Coarse SAND	ers	None documented I.D. of surface casing [_ND] (If present) Drilled with 8-in casing to 21-ft, pulled 8-in and drilled with 6-in casing to 90-ft.
70-73: SAND and GRAVEL 73-85: SAND, GRAVEL and SILT 85-90: SAND, GRAVEL, BOULDERS	and SILT	I.D. of riser pipe: [6-in] Type of riser pipe: Carbon steel Diameter of borehole: [7-in nom]
REMEDIATION: Multiple remediations/cle Perforated 62*70-ft, Row, Bultena set cement plug to May78.	Apr51. + +	Type of filler: Not documented Depth top of perforations: [62-ft] Description of perforations: 62-70-ft, not documented 70-88-ft, 5 holes/ft
		Depth to bottom, 83.3-ft 07Jun91 TV Cement plug set to 86-ft Depth bottom of perforations: [88-ft] Depth bottom of casing: ["90-ft] Depth bottom of borehole: [90-ft]
Drawing By: <u>RKL/1#84#02.ASB</u> Reference: <u>HANFORD WELLS</u>	Date:	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-B4-2

199-84-2 WELL DESIGNATION CERCLA UNIT 100-BC-5

RCRA FACILITY NA

69,933 W 80,672 HANFORD COORDINATES : N LAMBERT COORDINATES : N 475,028 E 2,214,474

Feb49 DATE DRILLED DEPTH DRILLED (GS) : 90-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

83.3-ft, 07Jun91 TV 63-ft, Feb49; 59.7-ft, 07Jun91 TV 8-in, from +1.0+90-ft 461.99-ft

CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 461.0-ft Estimated

PERFORATED INTERVAL : 62+88-ft

SCREENED INTERVAL NA

COMMENTS

FIELD INSPECTION, 25Feb91, Carbon steel, pump hanger holes, no pad, no posts, capped, and locked. No permanent identification. Not in radiation zone.

OTHER: Driller AVAILABLE LOGS

TV SCAN COMMENTS 07Jun91, depths referenced to ground surface;

Depth to bottom: 83.3-ft, looked like weeds on bottom.
Depth to water: 59.7-ft, floating debris. Water clear with some dislodged scale

and suspended debris.

Vadose casing looked good, light corrosion/scale/rust;

submerged casing fairly heavy scale.

Perforations start at 54.8-ft to not determined. The well needs cleaning.

None

30Sep91, Depth to bottom: 85.0-ft, sandy. Depth to water: 61.7-ft, some floating debris. Water clear. Vadose casing clean, some pitting from 30-ft to water;

submerged casing clean. Perforations start at 57.4-ft to not determined. 4 cuts/rd/ft, open above water, most were visible below water.

The well is in good shape.

DATE EVALUATED

EVAL RECOMMENDATION :

108-B crib, sampled 1989 for $^3\mathrm{H}$, U, $^{90}\mathrm{Sr}$, $\mathrm{NO_3}$,; water levels measured 07Feb89+05Mar90 LISTED USE

PUMP TYPE

3.7

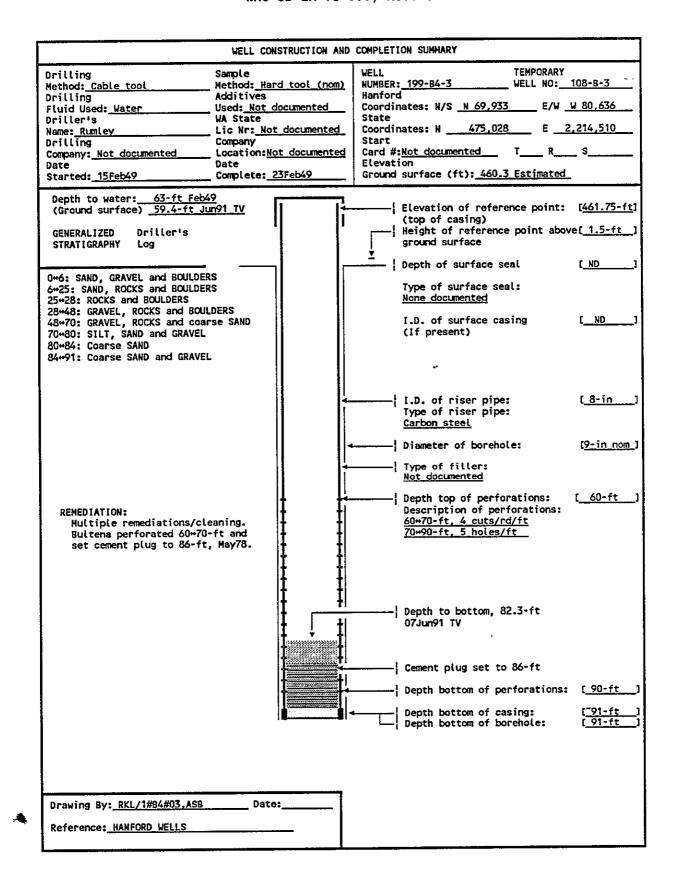
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07Jun91; TV run. MAINTENANCE

18Sep91; Brushed casing and bailed debris. No contamination encountered.

27Sep91; Developed well to <5 NTU. 30Sep91; TV run



WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Method: Cable tool	Sample Method: Hard tool (nom)	WELL TEMPORARY NUMBER: 199-84-4 WELL NO:		
Drilling	Additives	Hanford		
Fluid Used: Water	Used: Not documented	Coordinates: N/S N 68,978 E/W W	80,367	
Driller's	WA State	State	74/ 704	
Name: St George	Lic Nr: Not documented	Coordinates: N 474,073 E 2.	<u> </u>	
Orilling Company Not designanted	Company Location:Not documented	Card #: Not documented T R	s	
Company: Not documented Date	Date	Elevation	· ~	
Started: 31Aug60	Complete: 13Sep60	Ground surface (ft): 469.7 Estimated		
Depth to water: 75-ft Sepé (Ground surface) 69.9-ft Ju GENERALIZED Driller's STRATIGRAPHY Log	0 n91 TV	Elevation of reference point: (top of casing) Height of reference point above ground surface	[<u>2,4-ft</u>]	
0.40 GRUNDEDO 1 - 11 - 11 - 11 - 11 - 11 - 11 - 11	——————————————————————————————————————	Depth of surface seal	[<u>ND</u>]	
0+10: BOULDERS and silty SAND 10+15: COBBLE and silty SAND 15+20: GRAVEL and SAND		Type of surface seal: None documented		
20+85: GRAVEL and silty SAND (Hit BOULDER at 35.5 85+105: Silty SAND, GRAVEL 105: Heavy SAND	ft)	<pre>1.D. of surface casing (If present)</pre>	[<u>ND</u>]	
DRILLER'S NOTE: Well blows steam. Water 130*145* temperature.	—	I.D. of riser pipe: Type of riser pipe: Carbon steel	[<u>8- in</u>]	
		Diameter of borehole: Type of filler: Not documented Depth top of perforations:	[_9-in_nom]	
REMEDIATION: Multiple remediations/cle	eaning.	Description of perforations: 49-80-ft, 4 cuts/ft 80-90-ft, 1 cut/ft 90-102-ft, 4 cuts/ft		
		Depth to bottom, 90.0-ft 10Jun91 TV		
	Sand:::	Depth bottom of perforations:	[102-ft]	
		•		
		Depth bottom of casing: Depth bottom of borehole:	[<u>105-ft</u> [<u>105-ft</u>	
Drawing By: <u>RKL/1#84#04.ASB</u>	Date:			
Reference: HANFORD WELLS				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-B4-3

WELL DESIGNATION 199-B4-3 100-BC-5 CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : 69,933 W 80,636 N N 475,028 E 2,214,510 LAMBERT COORDINATES :

DATE DRILLED Feb49 91-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : 82.3-ft, 07Jun91 TV

DEPTH TO WATER (GS)

63-ft, Feb49; 59.4-ft, 07Jun91 TV 8-in, from +1.5-91-ft 461.75-ft CASING DIAMETER ELEV TOP CASING

ELEV GROUND SURFACE : 460.3-ft Estimated PERFORATED INTERVAL : 60+90-ft

SCREENED INTERVAL NA

FIELD INSPECTION, 25Feb91, COMMENTS

Carbon steel, pump hanger holes,

no pad, no posts, capped, and locked. No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS Driller

07Jun91, depths referenced to ground surface; TV SCAN COMMENTS

Depth to bottom: 82.3-ft, the well had a piece of pipe on bottom. Could not tell what size or how long. It will have to be fished before the well is cleaned. Depth to water: 59.4-ft, some floating debris. Water clear, some dislodged scale

and suspended debris.

Vadose casing light corrosion/scale/rust; submerged casing fairly heavy

corrosion/scale/rust. Perforations never seen.

30Sep91:

Depth to bottom: 83.3-ft, sandy.

Depth to water: 61.0-ft, some floating debris. Water clear. Vadose casing clean; submerged casing clean. Perforations start at 58.8-ft to not determined, 3 cuts/rd/ft. Open above water, most were visible below water. The article seen in 1st run was a plastic bottle, removed during casing cleaning.

The well is in good shape.

DATE EVALUATED

EVAL RECOMMENDATION : NA

108-B crib, sampled 1989 for 3 H, U, 90 Sr, 80 X,; LISTED USE

water levels measured 11Jul57+01Mar90

PUMP TYPE

MAINTENANCE

07Jun91; TV run. 17Sep91; Removed sample bottle, brushed casing and bailed debris.

No contamination encountered.

26Sep91: Developed well to <5 NTU.

30Sep91; TV run.

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-84-4

199-B4-4 WELL DESIGNATION 100-BC-5 CERCLA UNIT

RCRA FACILITY NA

N 68,978 W 80,367 N 474,073 E 2,214,781 HANFORD COORDINATES : N LAMBERT COORDINATES :

DATE DRILLED Aug-Sep60 105-ft

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 90.9-ft, 10Jun91

DEPTH TO WATER (GS) :

75-ft, Sep60; 69.9-ft, 10Jun91 8-in, from +2.4+105-ft 472.14-ft CASING DIAMETER ELEV TOP CASING 469.7-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : 49+102-ft

SCREENED INTERVAL NA

FIELD INSPECTION, 25Feb91, COMMENTS

Carbon steel, pump hanger holes, no pad,

no posts, capped, and locked. No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS Driller

TV SCAN COMMENTS

10Jun91, depths referenced to ground surface; Depth to bottom: 90.9-ft, silty.

Depth to water: 69.9-ft, some floating debris. Water clear, some dislodged scale

and suspended debris.

Vadose casing good, light corrosion/scale/rust; submerged casing dirty. Perforations start at 46.9-ft to not determined. The well needs cleaning.

: SHA DATE EVALUATED

EVAL RECOMMENDATION :

Sampled 1989 for $^3\mathrm{H}$, U, $^{90}\mathrm{Sr}$, NO $_3$, Cr; water levels measured 28Apr61+01Mar90 LISTED USE

Electric submersible, intake set at xxxx ft PUMP TYPE

28May91; Pulled pump. No contamination encountered.

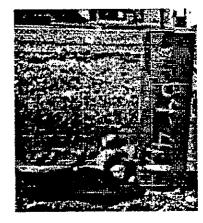
MAINTENANCE

10Jun91; TV run

13&18Jun91; Brushed casing and bailed debris with sand pump and bailer.

much sand fill coming in.

15Jul91; Developed well by pumping to <5 NTU.



WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Method: Cable tool Drilling Fluid Used: Water Driller's Name: Wilcox/Richards Drilling Company: Haden Drilling Date Started: 13Aug62	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location:Not documented Date Complete: 27Aug62	Hanford Coordinates: N/S N 69,930 E/W W 82,000 State Coordinates: N 475,021 E 2,213,146 Start		
Depth to water: 68-ft Aug6 (Ground surface) 54.9-ft Ju GENERALIZED Driller's STRATIGRAPHY Log O+1: 6 in minus GRAVEL 1+11: COBBLES & GRAVEL with s 11: BOULDER or cluster of l COBBLES 11+20: COBBLES & GRAVEL with 20+25: GRAVEL & some COBBLE, 25+80: GRAVEL with some SILT with some SILT & SAND 80+90: GRAVEL with SAND	ilty SAND arge trace SILT trace SILT	Elevation of reference point: [455,56-ft] (top of casing) Height of reference point above[2.8-ft] ground surface Depth of surface seal Type of surface seal: None documented 1.D. of surface casing [ND] (If present)		
90+130: GRAVEL with SAND and 130+135: GRAVEL with SAND & S 135+151: GRAVEL with SAND & S REMEDIATION: Multiple remediations/cle Bultena set wooden and ce plug to 100-ft, May78.	ome CLAY	I.D. of riser pipe: [8-in] Type of riser pipe: Carbon steel		
Drawing Rvs PK1 /1#85#04 Aco	Date:	Depth to bottom, 99.9-ft 20Jun91 Cement plug set to 100-ft Wooden plug depth not documented Depth bottom of perforations: [148-ft] Depth bottom of casing: [151-ft] Depth bottom of borehole: [151-ft]		
Drawing By: RKL/1#85#01.ASB Reference: HANFORD WELLS	pare:			

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-B5-1

WELL DESIGNATION 199-B5-1 100-BC-5 CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : N 69,930 W 82,000 N 475,021 E 2,213,146 LAMBERT COORDINATES :

DATE DRILLED Aug62 DEPTH DRILLED (GS) : 151-ft

MEASURED DEPTH (GS) : 99.9-ft, 20Jun91

DEPTH TO WATER (GS) :

68-ft, Feb49; 54.9-ft, 20Jun91 8-in, from +2.8~151-ft 455.56-ft CASING DIAMETER

ELEV TOP CASING ELEV GROUND SURFACE : 452.8-ft Estimated

PERFORATED INTERVAL : 40+148-ft

SCREENED INTERVAL NA

COMMENTS

FIELD INSPECTION, 25Feb91, Carbon steel, pump hanger holes, no pad, 4 posts, capped, and locked.

No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS Driller

TV SCAN COMMENTS 07Jun91, depths referenced to ground surface;

Depth to bottom: 96.5-ft, silty.

Depth to water: 52.2-ft, some floating debris. Water clear, some dislogged scale

and suspended debris.

Vadose casing light corrosion/scale/rust; submerged casing has heavy scale. Perforations start at 61.7-ft to not determined. The well needs cleaning.

DATE EVALUATED

EVAL RECOMMENDATION :

Sampled 1989 for ³H,U,⁹⁰Sr,NO₃,; water levels measured 28Aug62²⁰05Mar90 LISTED USE

. PUMP TYPE

Electric submersible, intake set at xxxx ft. 06Jun91; Pulled pump. No contamination encountered. MAINTENANCE

07Jun91; TV run.

20Jun91; Brushed casing and cleaned debris with sand pump and bailer.

16Jul91; Developed well by pumping to <5 NTU.

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-B9-1

199-89-1 WELL DESIGNATION 100-BC-5 CERCLA UNIT

RCRA FACILITY NA

67,500 W 79,961 HANFORD COORDINATES : N N 472,596 E 2,215,191 LAMBERT COORDINATES :

DATE DRILLED Jun+Jul52

92-ft (25-ft casing added = 117-ft) DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) :

75-11 Cashing dates - 111 115.7-ft, 30Jul91 98-ft, Jul52; 92.5-ft, 30Jul91 8-in, from +2.9+117-ft 478.87-ft DEPTH TO WATER (GS) :

CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 476.0-ft Estimated

80+110-ft PERFORATED INTERVAL :

SCREENED INTERVAL NA

FIELD INSPECTION, 25Feb91, COMMENTS

Carbon steet, pump hanger holes, no pad, no posts, capped, and locked. No permanent identification.

Not in radiation zone.

OTHER: Driller AVAILABLE LOGS

10Jun91, depths referenced to ground surface; TV SCAN COMMENTS

Depth to bottom: 114.8-ft, silty. Appeared to be a piece of tin on bottom.

Depth to water: 92.2-ft, some floating debris. Water clear, some dislodged scale

and suspended debris.

Vadose casing fairly clean, some light corrosion/scale/rust;

submerged casing fairly heavy scale. Perforations start at 73.8-ft to not determined. Cuts were large and sporadic.

24Jul91,

Depth to bottom: 115.2-ft, sandy, 2 fairly large rocks on bottom. Depth to water: 91.9-ft, light floating debris. Water clear.

Vadose casing clean, submerged casing clean.

Perforations 72.5-ft*not determined. 4 cuts/rd/ft. All that were visible

were open and in good shape.

DATE EVALUATED

EVAL RECOMMENDATION :

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105-C crib, sampled 1989 for ³H, U, ⁹⁰Sr, NO₃, Cr; LISTED USE

water levels measured 27Dec62+01Mar90

Electric submersible, intake set at 103.21-ft (TOC). PUMP TYPE 03Jun91; Pulled pump. No contamination encountered. 10Jun91; TV run. 19Jun91; Brushed casing and cleaned debris with sand pump and bailer. MAINTENANCE

12Jul91; Developed well by pumping to <5 NTU.

24Jul91: TV run.

30Jul91; Installed pump. Depth-to-water, 95.4-ft; depth-to-bottom, 118.6-ft (TOC).

Type of filler: Not documented		WELL CONSTRUCTION AND	COMPLETION SUMMARY	
Started Lie Nr: Not documented Coordinates: N 499,990 E 2.24,252 Coordinates: N 249,990 E	Method: Cable tool Drilling Fluid Used: Water	Method: <u>Hard tool (nom)</u> Additives Jsed: <u>Not documented</u>	NUMBER: 199-D2-5 WELL NO: Hanford Coordinates: N/S N 90,783 E/W W	
Depth to water: 74-ft Aug60 (Ground surface)70.2-ft Jul01 GENERALIZED Driller's STRATIGRAPHY Log O+15: 12-in COBBLE and SILTy SSTBATIGRAPHY Log O+15: 12-in COBBLE and SAND 35-95: SAND with small trace of SILT 50-80: 3-in mirus GRAVEL, and SAND 35-95: SAND with small trace of SILT 50-80: 3-in mirus GRAVEL, silty SOND 90-90: Yellow CLAY sight amount of SAND 95: Yellow CLAY, small pieces BASALT I.D. of riser pipe: Carbon steel I.D. of riser pipe: Type of riser pipe: Carbon steel Depth to perforations: Description of perforations: Description of perforations: 1.36-ft Depth bottom of casing: Depth bottom of borehole: Depth bottom of casing: Depth bottom of borehole: Depth bottom of borehole: Depth bott	Name: St. George Drilling Company: Hatch Drilling Date Date	Company Location: <u>Pasco, WA</u>	Start Card #:Not documented T R Elevation	
Depth bottom of borehole: [95-ft]	Depth to water: 74-ft Aug60 (Ground surface)70.2-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+15: 12-in COBBLE and silty S. 15+25: 3-in GRAVEL and SAND 25+30: GRAVEL and SAND 30+35: Small GRAVEL and SAND 35+45: SAND with small trace of 45+50: 3-in minus GRAVEL, silt 50+80: 3-in minus GRAVEL, and 80+90: 2-in minus GRAVEL, silt 90+95: Yellow CLAY slight amount of SAND	AND f SILT y SAND y SAND	Elevation of reference point: (top of casing) Height of reference point above ground surface Depth of surface seal: None documented I.D. of surface casing (if present) I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole: Type of filler: Not documented Depth top of perforations: Description of perforations: 36~86-ft, 6 holes/ft	(2.6-ft) (ND) (ND) (8-in) (9-in nom)
Drawing By: RKL/1#D2#05.ASB Date:				
Reference: HANFORD WELLS		Date:		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-D2-5

199-02-5 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

N 90,783 W 52,638 N 495,950 E 2,242,454 HANFORD COORDINATES : LAMBERT COORDINATES :

Aug60 95-ft DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

74-ft Aug60; 70.2-ft Jul91 8-in, from +2.6+95 ft 460.87-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 458.3-ft Estimated

36+86-ft PERFORATED INTERVAL : SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 14Jun90;

Carbon steel. No pad, no posts, capped, and locked. No permanent

identification.

Driller AVAILABLE LOGS TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : NA

Water levels measured 22Jun64+29Jul91 LISTED USE Electric submersible pump on J-hook PUMP TYPE

MAINTENANCE ND

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Additives Fluid Used: Water Used: Not of Used: N	t documented	Hanford Coordin State Coordin Start Card #: Elevati	nates: N/S <u>N 92,1</u> nates: N <u>497,2</u> Not documented	92 E _2 T R	W 52,546 ,242,543
Depth to water: 78-ft Aug60 (Ground surface)81.6-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log O+15: Large COBBLES, SAND with SILT 15+20: 6-in minus GRAVEL, silty SAND 20+25: 2-in minus GRAVEL and silty SAND 35+50: GRAVEL and silty SAND 50+55: GRAVEL and silty SAND, cemented 55+60: GRAVEL and silty SAND slightly cemented 60+85: GRAVEL and silty SAND 85+89: GRAVEL and silty SAND 85+89: GRAVEL & SAND, less SILT 89+91: CLAY REMEDIATION: Sep69, by Bigham Perforated 36+86-ft Sep74, by Bultena Perforated 85+90-ft			Elevation of reference (top of casing) Height of reference ground surface Depth of surface Type of surface some documented I.D. of surface of (If present) I.D. of riser pip Carbon steel Diameter of boreh Type of filler: Not documented Depth top of perf Description	seal eal: asing e: e: crations: crforations: drft, cumented	-
Drawing By: RKL/1#05#12.ASB Date Reference: HANFORD WELLS	: 				

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-D5-12

WELL DESIGNATION 199-D5-12

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 92,125 W 52,546 N 497,292 E 2,242,543 Aug60 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): 91-ft

78-ft Aug60; 81.6-ft Jul91 CASING DIAMETER 8-in, from +1.4+91 ft 469.67-ft ELEV TOP CASING 468.3-ft Estimated 35+90-ft ELEV GROUND SURFACE :

PERFORATED INTERVAL : SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 14Jun90;

Carbon steel. No pad, no posts, capped, and locked. No permanent

identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS : NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

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LISTED USE : Water levels measured 09Dec60+29Jul91 Electric submersible pump on J-hook PUMP TYPE MAINTENANCE 26Jul77; - Brushed and bailed to 95-ft



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-D8-2

WELL DESIGNATION 199-08-2

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

N 94,725 W 53,018 N 499,891 E 2,242,064 Jun52 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 76-ft ND

DEPTH TO WATER (GS) :

50-ft Jun52; 42.0-ft, Jul67 6-in, from +1.5+76 ft 444.61-ft CASING DIAMETER

ELEV TOP CASING

443.1-ft Estimated 30+75-ft ELEV GROUND SURFACE : PERFORATED INTERVAL :

SCREENED INTERVAL NA

FIELD INSPECTION, 14Jun90; COMMENTS

Carbon steel. No pad, no posts, capped, and locked. No permanent identification. Casing damaged, bent.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA : NA DATE EVALUATED EVAL RECOMMENDATION : NA

Water levels measured 16Jun57+06Jul67 LISTED USE

PUMP TYPE None MAINTENANCE ND

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WELL CONSTRUCTION AND COMPLETION SUMMARY			
	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: ate pmplete: 12Jun52	WELL TEMPORARY NUMBER: 199-D8-3 WELL NO: 1 Hanford Coordinates: N/S N 94,720 E/W State Coordinates: N 499,888 E 2 Start Card #:Not documented T R Elevation Ground surface (ft): 448.3 Estimated	w 52,205 ,242,877
Depth to water: 55-ft Aug60 (Ground surface)64.4-ft Jul9 GENERALIZED Driller's STRATIGRAPHY Log O+8: BOULDERS and ROCK 8+15: BOULDERS and GRAVEL 15+22: GRAVEL and black SAND 22+30: GRAVEL, some SAND 30+43: SAND with very little 43+45: SAND, GRAVEL and SILT 45+65: GRAVEL, SAND and some 65+80: GRAVEL and SAND	GRAVEL SILT	Elevation of reference point:	
Drawing By: RKL/1#08#03.ASB Reference: HANFORD WELLS	Date:		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-D8-3

WELL DESIGNATION 199-08-3

100-Aggregate Area CERCLA UNIT

RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES : N 94,720 W 52,205 N 499,888 E 2,242,877

Jun52 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 80.5-ft ND

DEPTH TO WATER (GS) :

55-ft, Aug60; 64.4-ft, Jul91 6-in, from +0.8+80 ft 449.06-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 448.3-ft Estimated

35+79-ft PERFORATED INTERVAL : SCREENED INTERVAL NA

FIELD INSPECTION, 14Jun90; COMMENTS

Carbon steel. No pad, no posts, capped, and locked. No permanent identification.

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

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Water levels measured 16Jun52+29Jul91 LISTED USE PUMP TYPE Electric submersible pump om J-hook.

MAINTENANCE

05Jun74; - Repaired bent casing, cleaned well 16Aug76; - Brushed and bailed 13Jun79; - Developed with pump 11Apr80; - Brushed and bailed

WELL CONSTRUCTION AND COMPLETION SUMMARY				
Date Da	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: te mplete: 10Sep48	WELL NUMBER: 199-F5-1 Hanford Coordinates: N/S N State Coordinates: N 4 Start Card #:Not documente Elevation Ground surface (ft):	84,760 E 2	w 28,255 ,266,866
Depth to water: <u>35-ft Sep48</u> (Ground surface) <u>29.6-ft Jun9</u> GENERALIZED Driller's	<u> </u>	(top of casin	erence point abov	
STRATIGRAPHY Log 0+15: SAND		ground surface Depth of surf		[_ND]
15+20: SAND and very little G 20+22: Very little SAND, GRAV and mostly BASALT 22+23: Gray SAND and little G 23+24: SAND, GRAVEL and mostl 24+25: GRAVEL - mostly BASALT 25+60: Grey SAND 60+62: SAND and mostly CLAY 62+66: CLAY	EL RAVEL y BASALT	Type of surfa None document I.D. of surfa (If present)	ed	[<u></u>]
66-67: ROCK		I.D. of riser Type of riser <u>Carbon steel</u>		[<u>6-in</u>]
		Diameter of b	r:	[<u>7-in_nom</u>]
		4 cuts/ft	f perforations:	[_35-ft]
	# #	Depth bottom	of perforations:	[<u>63-ft</u>]
		Depth bottom		[_67-ft] [_67-ft]
Drawing By: <u>RKL/1#F5#01.ASB</u> Reference: <u>HANFORD WELLS</u>	Date:			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F5-1

199-F5-1 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 79,531 W 28,255 N 484,760 E 2,266,866 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Sep48 67.0-ft DEPTH DRILLED (GS) : MEASURED DEPTH (GS) :

DEPTH TO WATER (GS) :

35-ft, Sep48; 29.6-ft, Jun91 6-in, +ND+67-ft 406.56-ft CASING DIAMETER ELEV TOP CASING

405.6-ft Estimated 35+63-ft ELEV GROUND SURFACE : PERFORATED INTERVAL :

SCREENED INTERVAL NA

FIELD INSPECTION, 18Aug89; COMMENTS

Carbon steel. No posts, no pad. Capped and locked.

No permanent identification.

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 310ct52+04Jun91 LISTED USE

PUMP TYPE None documented

040ct74; - Extended casing, reperforated 35+63-ft MAINTENANCE

WELL CONST	RUCTION AND	COMPLETIO	N SUMMARY		
Drilling Method: Cable tool Method: Cable tool Method: Hard Method: Hard Method: Hard Additives Fluid Used: Not documented Driller's Name: Gentz Drilling Company: Not documented Date Started: 22Jan53 Sample Method: Hard Additives Used: Not doc Used: Not	umented locumented	Hanford Coordina State Coordina Start Card #:N Elevatio	tes: N/S <u>N 79,73</u> tes: N <u>484,96</u> ot documented	56 E 2	y 28,828 ,266,292
Depth to water: 34-ft Feb53 (Ground surface) ND GENERALIZED Driller's STRATIGRAPHY Log 0+10: BOULDERS up to 12-in 10+11: BOULDERS and a little SAND 11+19: BOULDERS, 2-in up to 12-in 19+27: BOULDERS with a little SAND 27+30: GRAVEL up to 2-in with 25% SAND 30+40: GRAVEL and 50% SAND 40+45: GRAVEL and BOULDERS, up to 5-in 15% SAND 48+50: Coarse GRAVEL 50+65: Coarse GRAVEL 50+65: Coarse GRAVEL and 50% fine SAND 65+70: GRAVEL up to 3-in and fine SAND 70+75: 75% SAND and coarse GRAVEL and SAND 76+85: Ringold, Coarse GRAVEL and SAND 76+85: Ringold, GRAVEL and CLAY 85+90: SAND, GRAVEL and CLAY 90+95: SAND, SILT and CALICHE 95+100: SILT, SAND and CLAY 100 : SAND, SILT with a little CALICHE			levation of refer top of casing) eight of reference incomed surface septh of surface septh of surface septh of surface call for the surface of the surface call for the surface c	erforations: asing erforations: ft asing:	
Drawing By: RKL/1#F5#02.ASB Date: Reference: HANFORD WELLS					

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F5-2

WELL DESIGNATION 199-F5-2

100-Aggregate Area CERCLA UNIT

RCRA FACILITY

N 79,738 W 28,828 N 484,966 E 2,266,292 HANFORD COORDINATES : LAMBERT COORDINATES :

Feb53 DATE DRILLED DEPTH DRILLED (GS) : 100.0-ft

ND 34-ft, Feb53; 8-in, +ND+100-ft 413.02-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : CASING DIAMETER

ELEV TOP CASING ELEV GROUND SURFACE : ND

25+35 and 80+100-ft PERFORATED INTERVAL :

SCREENED INTERVAL NA

FIELD INSPECTION, COMMENTS

AVAILABLE LOGS Driller TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : NA LISTED USE None

PUMP TYPE None documented

MAINTENANCE

	WELL CONSTRUCTION AND	COMPLETION SUMMARY	
Drilling Method: <u>Cable tool</u> Drilling	Sample Method: <u>Hard tool (nom)</u> Additives	WELL NUMBER: 199-F5-3 Hanford	TEMPORARY WELL NO: 107-F-3
Fluid Used: <u>Not documented</u> Driller's	Used: Not documented WA State		2,588 E/W W 28,496
Name: Gentz Drilling	Lic Nr: Not documented Company		.817 E 2,266,625
Company: Not documented	Location:	Card #: Not documented Elevation	r s
	mplete: 08Jan53	Ground surface (ft):_	407.4 Estimated
Depth to water: 37-ft Jan53 (Ground surface)32,4-ft May5 GENERALIZED Driller's STRATIGRAPHY Log	<u>1</u>	(top of casing)	rence point above[<u>1.25-ft</u>]
		Depth of surface	ce seat [<u>ND</u>]
0+10: SAND and BOULDERS 10+15: Coarse GRAVEL 15+20: Coarse GRAVEL and SANC		Type of surface	
20+23: GRAVEL and BOULDERS 23+42: SAND and GRAVEL 42+50: GRAVEL 50+52: SAND and a very little 52+55: Pure SAND	GRAVEL	I.D. of surface (If present)	e casing [<u>ND</u>]
55+60: Small and coarse GRAVE 60+61: SAND and very little 0 61+63: SAND 63+65: Small GRAVEL		I.D. of riser	pipe: [<u>8-in</u>]
65+73: SILT and CLAY 73+90: Ringold 90 : SILT, CLAY and Ringold	.	Type of riser p	
yo . oter, oexi and kingott	· -	Diameter of bo	rehole [<u>9-in nom</u>]
		Not documented	
		Depth top of portion of Not documented Not documented	perforations:
Drawing By: <u>RKL/1#F5#03.ASB</u>	Date:	Depth bottom o Depth bottom o Depth bottom o	
Reference: HANFORD WELLS			

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F5-3

WELL DESIGNATION 199-F5-3

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

N 79,588 W 28,496 N 484,817 E 2,266,625 HANFORD COORDINATES : LAMBERT COORDINATES :

Jan53 DATE DRILLED DEPTH DRILLED (GS) : 90.0-ft MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

37-ft, Jan53; 32.4-ft, May91 8-in, +ND+90-ft 408.62-ft CASING DIAMETER ELEV TOP CASING 407.4-ft Estimated 22+90-ft ELEV GROUND SURFACE :

PERFORATED INTERVAL :

SCREENED INTERVAL NA

FIELD INSPECTION, 18Aug89; COMMENTS

Carbon steel, no pad, no posts. Capped and locked.

No permanent identification.

Driller AVAILABLE LOGS NA TV SCAN COMMENTS DATE EVALUATED EVAL RECOMMENDATION : NA

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Water levels measured 15Jan53+31May91 LISTED USE

None documented PUMP TYPE

09Apr75; - Brushed and bailed MAINTENANCE

22May78; - Cleaned out to 66-ft. Set cement plug at 63-ft

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WELL	CONSTRUCTION AND	COMPLETION SUMMARY	
Drilling Additive Fluid Used: Not documented Used: No Driller's WA State	Not documented	WELL TEMPORARY NUMBER: 199-F5-4 WELL NO: 107 Hanford Coordinates: N/S N 79,069 E/W W State Coordinates: N 484,292 E 2,2 Start Card #:Not documented T R Elevation Ground surface (ft):Not documented	30,650 264,472
Booth to waters 75 ft Toke7	<u> </u>	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Depth to water: 35-ft Feb53 (Top of casing)41.6-ft Mar90 GENERALIZED Driller's STRATIGRAPHY Log		Elevation of reference point:	
0+10: 75% coarse GRAVEL, 25% SILT 10+15: 50% SAND and SILT, 50% GRAVEL 15+18: 75% pea GRAVEL, 25% SAND and SI	LT	Type of surface seal: None documented	
18+24: Pure SAND 24+35: Coarse GRAVEL, 1-in up to 3-in 35+49: 50% GRAVEL, 50% SAND 49+50: CLAY and SAND 50+62: Gray CLAY and CALICHE 62+70: Pure CLAY 70+72: CLAY, SAND and GRAVEL 70+75: CLAY and SAND		<pre>1.D. of surface casing i (If present)</pre>	נ <u>סאַ</u> ז
75+90: CLAY 90+92: CLAY, little SAND and SILT 92+95: Ringold Formation and CLAY 95+103: Ringold, 5% GRAVEL		T.D. of riser pipe: Type of riser pipe: Carbon steel	[<u>8-in</u>]
103-115: CLAY and SILT	-	Diameter of borehole	[<u>9-in_nom</u>]
		Type of filler: Not documented	
·		Description of perforations: 35+65 and 65+105-ft, 4 cuts/ft	(<u>35-ft</u>)
			[105-ft]
	=	Depth bottom of casing: Depth bottom of borehole:	[<u>115-ft</u>] [<u>115-ft</u>]
Drawing By: RKL/1#F5#04_ASB Da	te:		
Reference: HANFORD WELLS			
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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F5-4

199-F5-4 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY НA

N 79,069 W 30,650 N 484,292 E 2,264,472 Feb53 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : 115.0-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 35-ft, Feb53; 41.6-ft, Mar90 (top-of-casing) 8-in, +ND+115-ft 412.12-ft

CASING DIAMETER

ELEV TOP CASING : ELEV GROUND SURFACE : ND PERFORATED INTERVAL : 35+105-ft

SCREENED INTERVAL

FIELD INSPECTION, COMMENTS

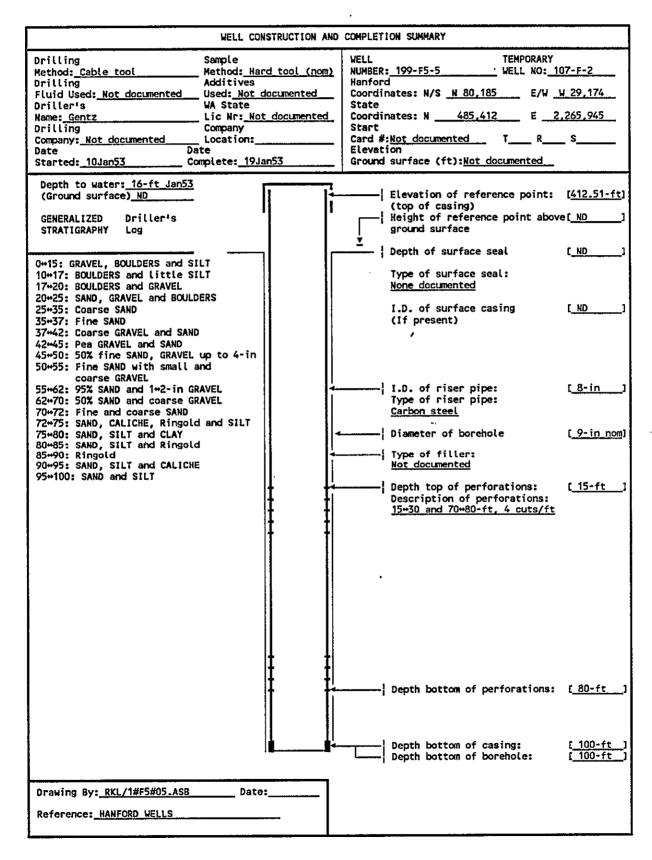
AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 16Jul65+05Mar90 LISTED USE

PUMP TYPE None documented

MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F5-5

WELL DESIGNATION 199-F5-5

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

HANFORD COORDINATES : LAMBERT COORDINATES : N 80,185 W 29,174 N 485,412 E 2,265,945

DATE DRILLED Jan53 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 100.0-ft

ND 16-ft, Jan53; 8-in, +ND+-100-ft 412.51-ft DEPTH TO WATER (GS) : CASING DIAMETER ELEV TOP CASING

ELEV GROUND SURFACE :

PERFORATED INTERVAL : SCREENED INTERVAL : 15+30 and 80+100-ft

NA

FIELD INSPECTION, COMMENTS

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA LISTED USE None

None documented PUMP TYPE

MAINTENANCE ND

	WELL CONSTRUCTION AND	COMPLETION SUMMARY
Method:_Cable_tool Drilling Fluid Used:_Water Driller's Name:_PRydman Drilling Company:_Not_documented Date Date	Sample Method: <u>Hard tool (nom)</u> Additives Used: <u>Bentonite</u> WA State Lic Nr: <u>Not documented</u> Company Location: ce plete: <u>13Aug56</u>	WELL TEMPORARY NUMBER: 199-F5-6 WELL NO: Hanford Coordinates: N/S N 80,537 E/W W 29,402 State Coordinates: N 485,763 E 2,265,716 Start Card #:Not documented T R S Elevation Ground surface (ft):Not documented
Depth to water:35,5-ft May85 (Top of casing)42,1-ft May90 GENERALIZED Driller's STRATIGRAPHY Log		Elevation of reference point: [412.95-ft] (top of casing) Height of reference point above[_ND
0+11: GRAVEL, BOULDERS and SAN 11+34: Loose GRAVEL and SAND, some BOULDERS 34+69: Large GRAVEL and fine to 69+74: Brown sandy SILT 74+97: Sandy CLAY 97+109: CLAY and GRAVEL 109+161: Sandy CLAY		Type of surface seal: None documented I.D. of surface casing [_ND
161+187: CLAY 187+192: Sticky CLAY		I.D. of riser pipe: [8-in Type of riser pipe: Carbon steel Diameter of borehole [9-in nome
		Type of filler: Not documented
		Preperforated 6-in liner "149+192-ft, 4 rows of 4-in cuts 4-in apart
Drawing By: RKL/1#F5#06.ASB	Date:	Depth bottom of casing: [-192-ft Depth bottom of borehole: [-192-ft]
Reference: HANFORD WELLS		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F5-6

199-F5-6 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT ..

RCRA FACILITY NA

N 80,537 W 29,402 N 485,763 E 2,265,716 HANFORD COORDINATES : LAMBERT COORDINATES :

Aug56 DATE DRILLED 192.0-ft DEPTH DRILLED (GS) : HEASURED DEPTH (GS) :

35.5-ft, May85; 42.1-ft, May90 (top-of-casing) 8-in, +ND+*192-ft; DEPTH TO WATER (GS) :

CASING DIAMETER

6-in preperforated liner, ~149-192-ft

ELEV TOP CASING 412.95-ft ELEV GROUND SURFACE : ND 35+74-ft PERFORATED INTERVAL :

SCREENED INTERVAL NA

FIELD INSPECTION, 07Aug89; COMMENTS

Carbon steel casing. No pad, no posts, capped and locked.

No permanent identification. Driller

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED EVAL RECOMMENDATION : NA

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Water levels measured 11Jul57+14May90 LISTED USE

PUMP TYPE Electric submmersible pump.

Date not documented - Slotted well, assumed 35+74-ft MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F7-1

199-F7-1 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 77,199 W 33,394 N 482,415 E 2,261,733 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Aug56 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 150.0-ft

DEPTH TO WATER (GS) :

13-ft, Aug56; 14.7-ft, Feb90 8-in, +0.2*-150-ft 389.74-ft CASING DIAMETER ELEV TOP CASING

ELEV GROUND SURFACE :

389.5-ft Estimated 10+25, 75+85, 90+100 and 130+140-ft PERFORATED INTERVAL :

NA SCREENED INTERVAL

FIELD INSPECTION, 18Aug89; COMMENTS

Carbon steel casing. Concrete pump pad-8x8-ft, no posts. No permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

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LISTED USE Water levels measured 11Jul57+28Feb90

PUMP TYPE Electric submersible pump.

MAINTENANCE 10Jan74; - Developed with pump

111+160ct74; - Perforated 10+20-ft, brushed and cleaned

WELL CONSTRUCTION AND COMPLETION SUMMARY			
Drilling Method: Cable tool Drilling Fluid Used: Water Driller's Name: O. Amos Drilling	Sample Method: Drive barrel Additives Used: Not documented WA State Lic Nr: Not documented Company	WELL TEMPORARY NUMBER: 199-F7-2 WELL NO: Hanford Coordinates: N/S N ND E/W State Coordinates: N ND E N Start	
Company: <u>Kaiser Engineers</u> Date Da	Location: <u>Richland, WA</u> ate omplete: <u>21Mar88</u>	Card #:Not documented T R Elevation Ground surface (ft): Not documented	-
Depth to water: 20.0-ft Mark (Ground surface) ND GENERALIZED Geologist's STRATIGRAPHY Log 0+5: Silty sandy GRAVEL 5+25: Sandy GRAVEL 25+31: Gravelly SAND	•	Elevation of reference point: (top of casing) Height of reference point above ground surface Depth of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts I.D. of riser pipe: Type of riser pipe: Stainless steel Diameter of borehole: Type of filler: Bentonite pellets Depth top of sand pack: Depth top of screen: 6-in, 20-slot 304 stainless steel Depth bottom of screen: Depth bottom of borehole: Depth borehole: Depth borehole: Depth borehole: Depth borehole: Depth borehole: Depth boreho	[_ND] e[_ND] [_0-4.5_ft]
Drawing By: RKL/1#F7#02.ASB Reference: HANFORD WELLS	Date:		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F7-2

199-F7-2 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

HANFORD COORDINATES : LAMBERT COORDINATES : N ND W ND N ND E ND

Mar88 DATE DRILLED DEPTH DRILLED (GS) : 31.0-ft ND

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

20.0-ft, Mar88; 6-in stainless steel, from +2.0+15.0-ft CASING DIAMETER

ELEV TOP CASING Not documented ELEV GROUND SURFACE : Not documented

PERFORATED INTERVAL : NA

SCREENED INTERVAL 6-in stainless steel, #20-slot, 15+30.5-ft;

COMMENTS FIELD INSPECTION,

AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA DATE EVALUATED НA EVAL RECOMMENDATION : NA

LISTED USE None

PUMP TYPE None documented

MAINTENANCE ND

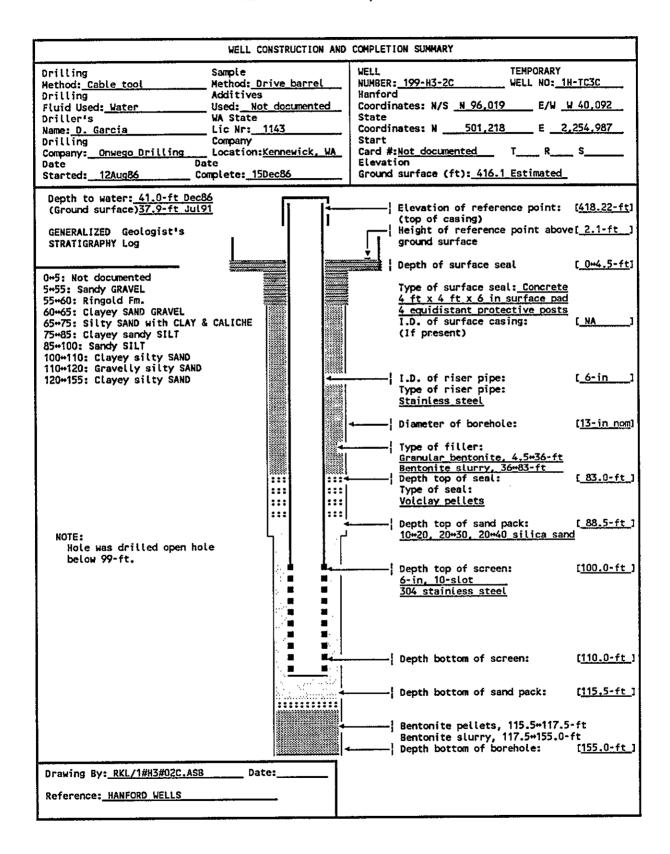
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WELL CONSTRUCTION AN	D COMPLETION SUMMARY
Drilling Method: Cable tool Drilling Fluid Used: Water Drilling Fluid Used: Water Drilling Company: Not documented Date Started: 18Jul60 Depth to water: 15.4-ft May60 (Top of casing) 35.0-ft Feb90 GENERALIZED Driller's STRATIGRAPHY Log O+10: TOP SOIL 10+25: SAND with heavy GRAVELS and COBBLES 25+33: Ringold (?) SAND and heavy GRAVELS 33-45: SCOATSE SAND and GRAVEL 35-47: Sticky CLAY 49+55: Sticky CLAY 49+55: Sticky CLAY and a little SAND 55-57: Sandy CLAY and small particles 57: Black ROCK	Hanford Coordinates: N/S N 78,536 E/W W 31,265 State
Drawing By: RKL/1#F8#01.ASB Date:	
Reference: HANFORD WELLS	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H3-2B

199-H3-2B WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 183-H Solar Evaporation Basins

N 96,041 W 40,104 N 501,240 E 2,254,975 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Dec86 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 58.0-ft

DEPTH TO WATER (GS) :

40.5-ft, Dec86; 37.7-ft, Jul91 6-in stainless steel, from +2.3+50.0-ft CASING DIAMETER

ELEV TOP CASING 418.42-ft

ELEV GROUND SURFACE : 416.1-ft Estimated PERFORATED INTERVAL : NA

SCREENED INTERVAL 6-in stainless steel,

COMMENTS

#20-slot, 50%5-ft; FIELD INSPECTION, 12Jun90; Stainless steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID. Not in radiation zone.

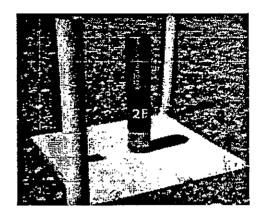
AVAILABLE LOGS Geologist TV SCAN COMMENTS NA

DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 20Nov86+26Jul91 LISTED USE

PUMP TYPE Hydrostar

MAINTENANCE



SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F8-1

WELL DESIGNATION 199-F8-1

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 78,536 W 31,265 N 483,758 E 2,263,858 HANFORD COORDINATES : LAMBERT COORDINATES :

Aug60 DATE DRILLED 57.0-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

15.4-ft, May60; 35.0-ft Feb90 (top-of-casing) 8-in, +ND+"57-ft

CASING DIAMETER

ELEV TOP CASING : ELEV GROUND SURFACE : 405.86-ft ND 13+53-ft PERFORATED INTERVAL :

SCREENED INTERVAL :

COMMENTS FIELD INSPECTION, 18Aug89;

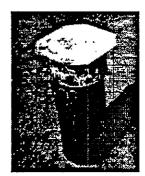
Carbon steel casing. No pad, no posts, capped and locked. No permanent identification.

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

LISTED USE Water levels measured 16Jul65*28Feb90

PUMP TYPE Electric submersible pump.

MAINTENANCE



WELL CONSTRUCTION AND COMPLETION SUMMARY			
	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Pasco, WA ste mmplete: 23Aug60	WELL TEMPORARY NUMBER: 199-F8-2 WELL NO: Hanford Coordinates: N/S N 78,661 E/W S State Coordinates: N 483,883 E 2 Start Card #:Not documented T R Elevation Ground surface (ft): 408.2 Estimated	,263,985
Depth to water: 15,4-ft Maye (Ground surface) 37.5-ft Febrary GENERALIZED Driller's STRATIGRAPHY Log 0+20: SAND, heavy GRAVEL and 20+21: SAND and GRAVEL 21+23: SAND and heavy GRAVELS 30+35: SAND and heavy GRAVELS 35+45: Clean SAND and GRAVEL (80% GRAVEL) 45+50: SAND and GRAVEL (60% GRAVEL) 50+52: SAND and heavy GRAVEL 52+54: Fine SAND and small GRAVEL GRAVEL 52+55: CLAY with black ROCK	COBBLES GRAVEL) (6-in)	Elevation of reference point:	
Drawing By: <u>RKL/1#F8#02.ASB</u> Reference: <u>HANFORD WELLS</u>	Date:		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-F8-2

WELL DESIGNATION 199-F8-2

CERCLA UNIT 100-Aggregate Area RCRA FACILITY NA N 78,661 W 31,138 N 483,883 E 2,263,985 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Aug60 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 55.0-ft

38-ft, Jun60; 37.5-ft, Feb90 8-in, +2.5+57-ft 410.74-ft DEPTH TO WATER (GS) :

CASING DIAMETER

ELEV TOP CASING 408.2-ft ELEV GROUND SURFACE : PERFORATED INTERVAL : 10+53-ft SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 18Aug89;

Carbon steel casing. No pad, no posts,

capped and locked.

No permanent identification. Driller

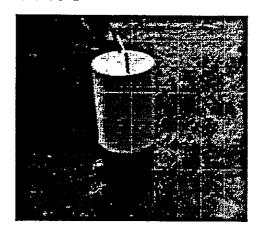
AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA **EVAL RECOMMENDATION:** NA

LISTED USE Water level measured 23Feb90

PUMP TYPE None MAINTENANCE ND

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	WELL CONSTRUCTION AND	COMPLETION SUMMARY
	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Pasco, WA ite mplete: 30Aug60	WELL TEMPORARY NUMBER: 199-H3-1 WELL NO: Hanford Coordinates: N/S N 94,994 E/W W 40,052 State Coordinates: N 500,193 E 2,255,029 Start Card #:Not documented T R S Elevation Ground surface (ft): 420.3 Estimated
Depth to water: 37.5-ft Augé (Ground surface)41.2-ft July GENERALIZED Driller's STRATIGRAPHY Log 0+5: Not documented 10+20: Silty COBBLE and SAND 20+25: Not documented 25+50: GRAVEL and silty SAND 50+56: SAND and GRAVEL 56+65: CLAY 65+70: CLAY and BASALT 70+75: SAND with CLAY 75 : BASALT and CLAY-SAND		Elevation of reference point: [421.98-f (top of casing) Height of reference point above[1.7-ft ground surface Depth of surface seal [ND] Type of surface seal:Surface pad 4-ft x 4-ft, depth not documented I.D. of surface casing [ND] (If present) I.D. of riser pipe: [8-in Type of riser pipe: Carbon steel Diameter of borehole: [9-in not documented] Depth top of perforations: [29-ft Description of perforations: 29-50-ft, 4 holes/ft, 51-68-ft, 1 spiral/ft, 69+74-ft, 4 holes/ft, 4 holes/ft, 51-68-ft, 4 holes/ft, 51-68-ft, 1 spiral/ft, 69+74-ft, 4 holes/ft, 51-ft Depth bottom of casing: [75-ft] Depth bottom of casing: [75-ft] Depth bottom of borehole: [75-ft]
Drawing By: RKL/1#H03#01.ASB Reference: HANFORD WELLS	Date:	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H3-1

199-H3-1 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY

N 94,994 W 40,052 N 500,193 E 2,255,029 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Aug60 75.0-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

37.5-ft, Aug60; 41.2-ft, Jul91 8-in, from +1.7+75-ft 421.98-ft

CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 420.3-ft Estimated

PERFORATED INTERVAL : 29+74-ft

SCREENED INTERVAL NA

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COMMENTS

FIELD INSPECTION, 12Jun90; Carbon steel casing. 4-ft x 4-ft concrete pad, 4 protective posts. Capped and locked. Identification stamped on brass cap.

Not in radiation zone.

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 22Feb62+26Jul91 LISTED USE

PUMP TYPE **Hydrostar**

MAINTENANCE 07+14Aug78; - Pump test

WELL CONSTRUCTION AND COMPLETION SUMMARY		
Drilling Method:_Cable tool Drilling Fluid Used: Water Driller's Name:_DGarcia Drilling Company:_Onwego Drilling Date Started:_150ct86 Depth to water:_41.0-ft No. (Ground surface)37.7-ft Ju	Sample Method: Drive barrel Additives Used: Not documented WA State Lic Nr: 1143 Company Location: Kennewick, WA Date Complete: 04Nov86	WELL NUMBER: 199-H3-2A Hanford Coordinates: N/S N 96,018 Coordinates: N/S N 96,018 State Coordinates: N 501,217 Start Card #:Not documented T R S Elevation Ground surface (ft): 416,1 Estimated Elevation of reference point: [417.83-ft]
GENERALIZED Geologist's STRATIGRAPHY Log O+4: Not documented 4+10: GRAVEL with SAND 10+54: Sandy GRAVEL 54+56: Sandy GRAVEL with CLAY and CALICHE		Height of reference point above [1.7-ft ground surface] Depth of surface seal [0-4.5 ft] Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts I.D. of surface casing: Removed (If present) 15-in nominal Surface hole to 10-ft I.D. of riser pipe: Type of riser pipe: Stainless steel Diameter of borehole: [11-in nom] Type of filler: Granular bentonite Depth top of seal: [26.5-ft] Type of seal: Volclay tablets Depth top of sand pack: [30,0-ft] Depth top of screen: [36.0-ft] Depth top of screen: [36.0-ft] Depth top of screen: [36.0-ft]
Drawing By: <u>RKL/1#H3#02A.A</u> Reference: <u>HANFORD WELLS</u>		304 stainless steel Depth bottom of screen: [_51.0-ft Telescoping screen, 41.0*51.0-ft 10-in stainless steel, 40-slot Depth bottom of borehole: [_56.0-ft

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H3-2A

199-H3-2A WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 183-H Solar Evaporation Basins

N 96,018 W 40,117 N 501,217 E 2,254,962 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Dec86 DEPTH DRILLED (GS) : 56.0-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

41.0-ft, Dec86; 37.7-ft, Jul91 6-in stainless steel, +1.7+36.0-ft CASING DIAMETER

ELEV TOP CASING 417.83-ft

416.1-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL :

6-in stainless steel, #20-slot, 36-51-ft; SCREENED INTERVAL :

10-in telescoping, stainless steel, #40-slot, 41+51-ft

COMMENTS FIELD INSPECTION, 12Jun90;

Stainless steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable.

Capped and locked, brass cap in pad with well ID. Not in radiation zone.

Geologist AVAILABLE LOGS

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

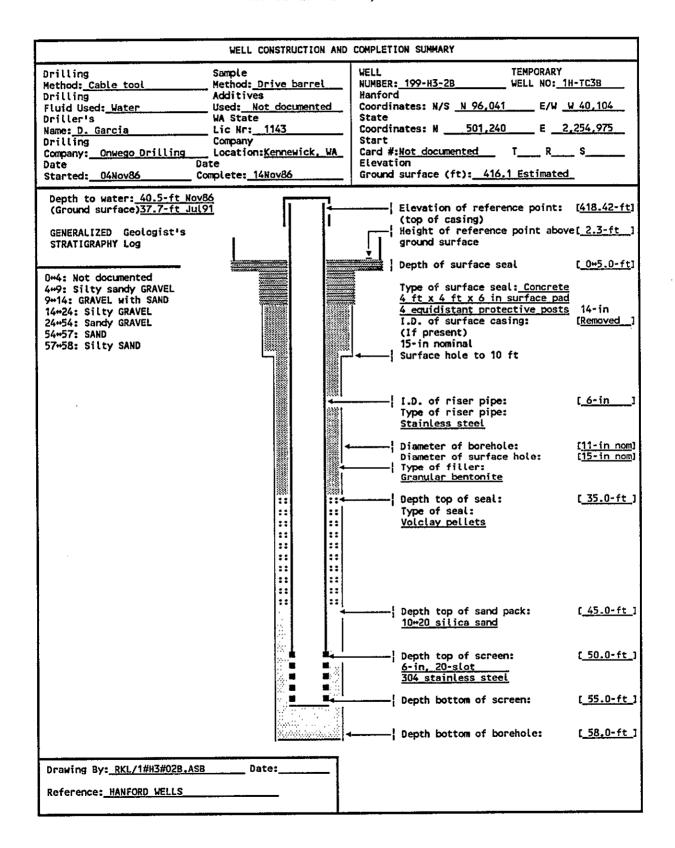
Water levels measured 20Nov86+26Jul91 LISTED USE :

PUMP TYPE Hydrostar

MAINTENANCE NĎ

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H3-2C

199-H3-2C WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

183-H Solar Evaporation Basins RCRA FACILITY

N 96,019 W 40,092 N 501,218 E 2,254,987 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Dec86 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 155.0-ft

41.0-ft, Dec86; 37.9-ft, Jul91 6-in stainless steel, from +2.3+50.0-ft CASING DIAMETER

418.22-ft ELEV TOP CASING

ELEV GROUND SURFACE : 416.1-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL

COMMENTS

6-in stainless steel, #20-slot, 100+110-ft;

FIELD INSPECTION, 12Jun90; Stainless steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable.

Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

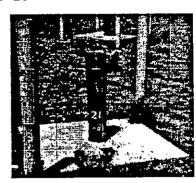
Geologist AVAILABLE LOGS

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

Water levels measured 20Nov86+26Jul91 LISTED USE

PUMP TYPE Hydrostar

MAINTENANCE ND



WELL CONSTRUCTION AND COMPLETION SUMMARY				
Method: Cable tool Method: Cable tool Drilling Aprilling Apriller's Understand Lorilling Company: Not documented Loate Date	ample ethod: Hard tool (nom) dditives sed: Not documented A State ic Nr: Not documented ompany ocation: lete: 01May52	Hanford Coordinate State Coordinate Start Card #:Not Elevation	9-H4-2 s: N/S <u>N 95,200</u> s: N	TEMPORARY WELL NO: 107-H-2 E/W W 38,565 E 2, , T R S
Depth to water: Flowed Apr52 (Top of casing)3.7-ft Jun84 GENERALIZED Driller's STRATIGRAPHY Log O+10: GRAVEL, SAND and SILT 10+31: GRAVEL and SAND 31+35: SAND and GRAVEL 35+37: GRAVEL and SAND (Perched water at 36.5-f 37+59: SAND, w/very little+some 59+68: SILT 68+75: Silty CLAY and rotten SA 75+80: CLAY, SILT, SANDSTONE, C and SAND 80+90: CLAY, rotten SANDSTONE a 90+95: SAND and silt-like SANDS 95+150: Sandy CLAY, SILT and chips of basalt GRAVEL 150+165: Sandy CLAY, SILT and Sayered 165+190: SAND, CLAY and SILT, s amount of small GRAVEL 192+205: Gray SAND, brown sandy 205+210: Whitish sandy ASH and some ROCK chips 210+215: Brown SAND, SILT and M 215+240: Gray muck, SAND, very 240+249: SAND, some SILT & BASA 249+250: Sandy CLAY 250+270: CLAY, SHALE and SANDST 270+272: Blue CLAY with GRAVEL 272+274: Sandy white MUD 274+275: Blue CLAY with GRAVEL 275+280: Green CLAY and fine GR 280+328: Black stiff MUD (1-ft of hard SHALE a) 328+340: Black MUD like SHALE 340+355: Black SHALE, green CLA 355+370: BASALT, rotten or weat 370+381: ASH, SAND, SILT, blue SHALE, GRAVEL and SAND (Water flowed while dr at 380-ft) 381+386: BASALT	GRAVEL NDSTONE ALICHE rd SAND TONE AND, malt SILT UD fine LT chips ONE AVEL 300-ft) Y hered CLAY, STONE	Cto Hei gro Pop Non Ca Pop Non Pop Non Pop Pop Non Pop P	p of casing)	ing (<u>ND</u>) [<u>6-in</u>] [<u>7-in nom</u>] ations: [<u>NA</u>]
		Dep	oth bottom of bore	ehole: [<u>386-ft</u>]
Drawing By: <u>RKL/1#H4#02.ASB</u> Reference: <u>HANFORD WELLS</u>	Date:			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-2

WELL DESIGNATION 199-H4-2

CERCLA UNIT 100-Aggregate Area

183-H Solar Evaporation Basins RCRA FACILITY

HANFORD COORDINATES : N 95,200 W 38,565 LAMBERT COORDINATES : N E 2,

Jun52 DATE DRILLED 386-ft

DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): ND

Flowed Apr52; 3.7-ft, Jun84 (top-of-casing) 6-in, +2.0*363-ft 421.12-ft

CASING DIAMETER

ELEV TOP CASING ELEV GROUND SURFACE : Not documented PERFORATED INTERVAL : None documented SCREENED INTERVAL

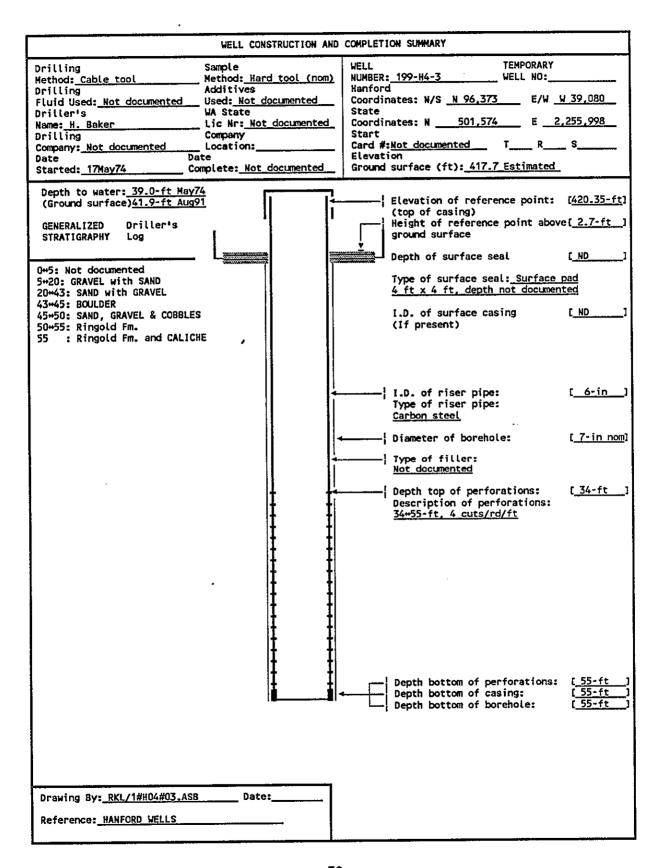
COMMENTS FIELD INSPECTION,

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 23May52+01Jun84 LISTED USE :

PUMP TYPE None ND MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-3

WELL DESIGNATION 199-84-3 :

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 183-H Solar Evaporation Basins

HANFORD COORDINATES : LAMBERT COORDINATES : N 96,373 W 39,080 N 501,574 E 2,255,998

DATE DRILLED Hay74 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 55.0-ft

39.0-ft, May74; 41.9-ft, Aug91 DEPTH TO WATER (GS) : CASING DIAMETER 6-in carbon steel, +2.7+55.0-ft

ELEV TOP CASING 420.35-ft

417.7-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : 34+55-ft

SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 12Jun90;

Carbon steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable.

Capped and Locked,

brass cap in pad with well ID. Not in radiation zone.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED EVAL RECOMMENDATION : NA

Water levels measured 19Jun85+01Aug91 LISTED USE

PUMP TYPE Hydrostar

MAINTENANCE NĎ

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Method: Cable tool	Sample Method: Hard tool	WELL TEMPORARY NUMBER: 199-H4-4 WELL NO:			
Drilling Fluid Used: Water	Additives Used: Not documented WA State	Hanford Coordinates: N/S N 93,560 E/W W 38,685 State			
Driller's Name: Troy Drilling	Lic Nr: Not documented Company	Coordinates: N 498,762 E 2,256,400 Start			
Company: Not documented Location:Not documented Date Date		Card #:Not documented T R S Elevation			
Started: 01Jun83	Complete: 10Jun83	Ground surface (ft): 412.4 Estimated			
Depth to water: 36.0-ft Ju (Ground surface)36.2-ft Au		Elevation of reference point: [413,76-ft]			
GENERALIZED Drīller's STRATIGRAPHY Log	1 1	Height of reference point above[_1,4-ft			
0+5: Not documented	- l 	Depth of surface seal (_0+~15-ft			
5+20: GRAVEL & medium-coars 20+50: Not documented	se SAND	Type of surface seal: <pre>Cement grout</pre>			
50↔55: SAND & fine GRAVEL	se SAND	I.D. of surface casing [10-in (Pulled back)			
REMEDIATION: May87; Installed surface pad.		1.D. of riser pipe: [_6-in			
		Diameter of borehole: I_7-in_nom			
		Type of filler: Not documented			
		Elevation/depth top of seal Type of seal: <u>Not documented</u>			
		Depth bottom of casing: [<u>34-ft</u> Pulled back from total depth			
		Telescoping screen 33-43-ft. 7-ft blank below, 5-ft top with packer			
	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXXX				
Drawing By: <u>RKL/1#H4#04.AS</u> Reference: <u>HANFORD WELLS</u>	B Date:	•			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-4

199-H4-4 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

183-H Solar Evaporation Basins RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES : N 93,560 W 38,685 N 498,762 E 2,256,400

Jun83 DATE DRILLED 55.0-ft

DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): ND

36.0-ft, Jun83; 36.2-ft, Aug91 6-in carbon steel, +1.4+34.0-ft CASING DIAMETER

ELEV TOP CASING 413.76-ft ELEV GROUND SURFACE : 412.4-ft Estimated

PERFORATED INTERVAL : NA SCREENED INTERVAL

33-43-ft, telescoping FIELD INSPECTION, 12Jun90; COMMENTS Carbon steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID. Not in radiation zone.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : NA

LISTED USE Water levels measured 22Jan85+01Aug91

PUMP TYPE Hydrostar MAINTENANCE NĎ

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Troy-0438 Lic Nr: Bigham-0036 Company Location: Not documented ate complete: 10May83	MELL TEMPORARY NUMBER: 199-H4-5 WELL NO: Hanford Coordinates: N/S N 96,639 E/W W 39,065 State Coordinates: N 501,840 E 2,256,012 Start Card #:Not documented T R S Elevation Ground surface (ft): 413.9 Estimated		
Depth to water: 36.0-ft Ma (Ground surface) 37.7-ft Ju GENERALIZED Driller's STRATIGRAPHY Log 0+5: GRAVEL, Mt. St. Helen's ASH, SAND & TOP SOIL 5+12: GRAVEL with SAND 12+20: GRAVEL	1191 1	Elevation of reference point: [416.26-ft (top of casing) Height of reference point above[2.4-ft ground surface] Depth of surface seal [0+15-ft] Type of surface seal: Cement grout		
20+30: GRAVEL & BOULDERS 30+36: SAND, GRAVEL, COBBLES & BOULDERS 36+48: SAND & GRAVEL with some COBBLES 48+60: Sandy SILT		I.D. of surface casing [10-in (Pulled back)] I.D. of riser pipe: [6-in Type of riser pipe: Carbon steel		
REMEDIATION: May87 Installed surface pad and brass survey marker		Diameter of borehole: [_7-in_nome		
		Pulled back from total depth, final depth not documented total depth, final depth not documented Telescoping screen 32*42-ft. 16-ft tail pipe with welded ring and packer on top		
Drawing By: RKL/1#H4#05.ASB Reference: HANFORD WELLS		Depth bottom of borehole [_60-ft,		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-5

WELL DESIGNATION 199-84-5

100-Aggregate Area CERCLA UNIT

183-H Solar Evaporation Basins RCRA FACILITY

N 96,639 W 39,065 N 501,840 E 2,256,012 May83 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 60.0-ft ND

36.0-ft, May83; 37.7-ft, Jul91

6-in carbon steel, +2.4-Not documented ("32-ft) CASING DIAMETER

ELEV TOP CASING : ELEV GROUND SURFACE : 416.26-ft

413.9-ft Estimated PERFORATED INTERVAL : NA 32-42-ft, telescoping FIELD INSPECTION, 12Jun90; SCREENED INTERVAL COMMENTS Carbon steel casing.

4-ft by 4-ft concrete pad,

4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE Water levels measured 22Jan85+26Jul91

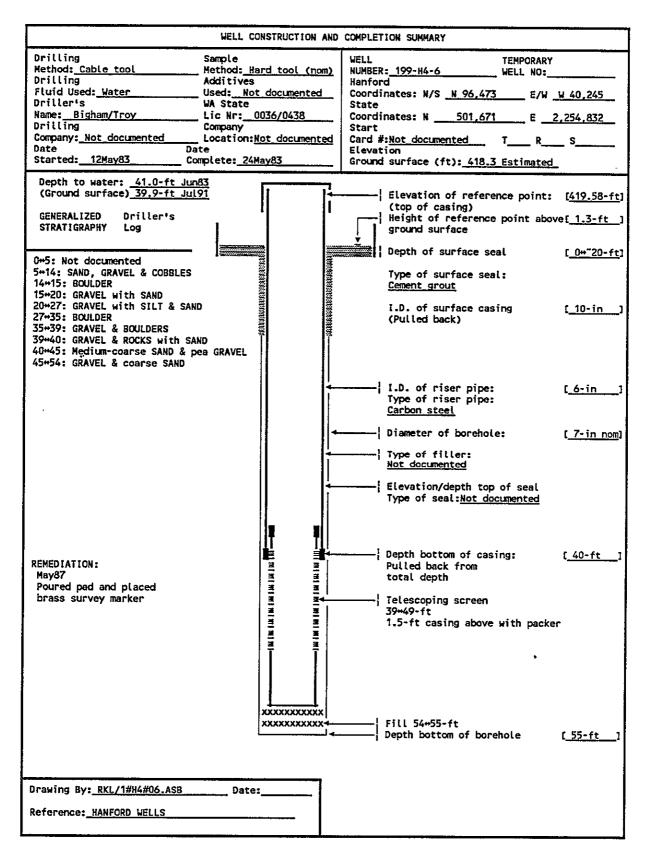
PUMP TYPE Hydrostar MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-6

WELL DESIGNATION 199-H4-6

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY

N 96,473 W 40,245 N 501,671 E 2,254,832 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED May83 DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): 55.0-ft ND

41.0-ft, Jun83; 39.9-ft, Jul91 6-in carbon steel, +1.3*40.0-ft CASING DIAMETER

419.58-ft ELEV TOP CASING

ELEV GROUND SURFACE : 418.3-ft Estimated PERFORATED INTERVAL : NA

39-49-ft, telescoping FIELD INSPECTION, 12Jun90; Carbon steel casing. SCREENED INTERVAL COMMENTS

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone.
Driller

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE Water levels measured 22Jan85+26Jul91

Hydrostar PUMP TYPE MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-7

WELL DESIGNATION 199-H4-7

100-Aggregate Area CERCLA UNIT

183-H Solar Evaporation Basins RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES : N 96,479 W 39,527 N 501,679 E 2,255,550

DATE DRILLED Sep86 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 55.0-ft ND

43.0-ft, Sep86; 41.0-ft, Jul91 6-in_stainless steel, +2.1-38.0-ft CASING DIAMETER

ELEV TOP CASING 420.59-ft

ELEV GROUND SURFACE : 418.5-ft Estimated

PERFORATED INTERVAL :

SCREENED INTERVAL

6-in stainless steel, #20-slot, 38-53-ft; 10-in telescoping screen, #40-slot, 43-53-ft FIELD INSPECTION, 12Jun90;

COMMENTS

Stainless steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

AVAILABLE LOGS Geologist TV SCAN COMMENTS NA

DATE EVALUATED ΝA EVAL RECOMMENDATION : NA

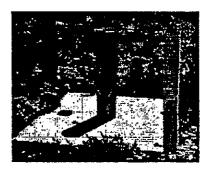
Water levels measured 20Nov86+26Jul91 LISTED USE

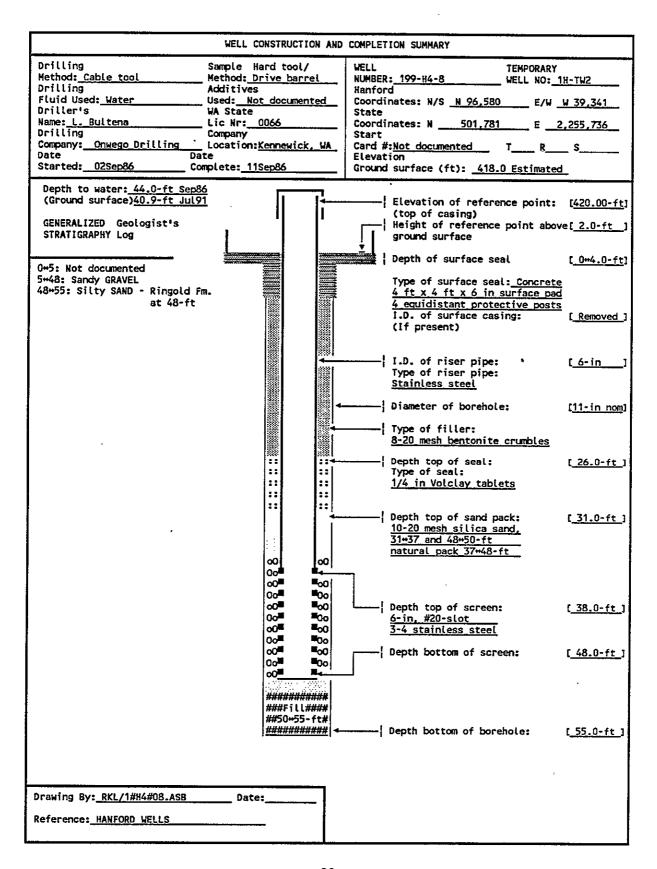
PUMP TYPE Hydrostar

MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-8

WELL DESIGNATION 199-H4-8

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 183-H Solar Evaporation Basins

N 96,580 W 39,341 N 501,781 E 2,255,736 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Sep86 DEPTH DRILLED (GS) : 55.0-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

44.0-ft, Sep86; 40.9-ft, Jul91 6-in stainless steel, +2.0+38.0-ft CASING DIAMETER

420.00-ft ELEV TOP CASING 418.0-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA SCREENED INTERVAL

6-in stainless steel, #20-slot, 38-48-ft;

FIELD INSPECTION, 12Jun90; Stainless steel casing. COMMENTS

4-ft by 4-ft concrete pad,

4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

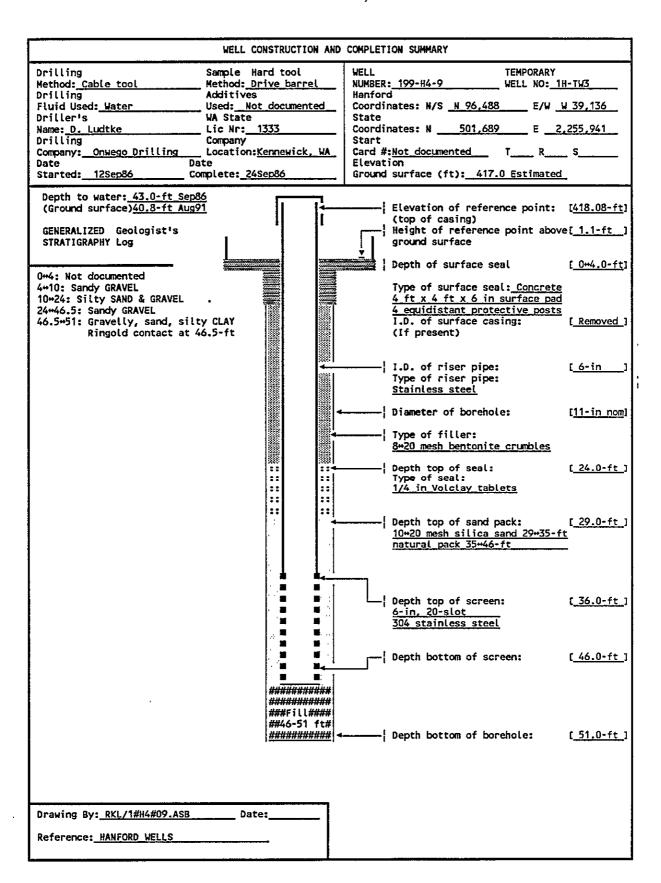
Not in radiation zone.

Geologist AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 20Nov86+26Jul91 LISTED USE

PUMP TYPE Hydrostar

MAINTENANCE NĎ



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-9

199-H4-9 WELL DESIGNATION

100-Aggregate Area **CERCLA UNIT**

RCRA FACILITY 183-H Solar Evaporation Basins

N 96,488 W 39,136 N 501,689 E 2,255,941 HANFORD COORDINATES :

LAMBERT COORDINATES :

DATE DRILLED Sep86 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 51.0-ft

ND

43.0-ft, Sep86; 40.8-ft, Jul91 6-in stainless steel, +1.1+36.0-ft DEPTH TO WATER (GS) : CASING DIAMETER

418.08-ft ELEV TOP CASING

ELEV GROUND SURFACE : 417.0-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL 6-in stainless steel, #20-slot, 36+46-ft;

FIELD INSPECTION, 12Jun90; Stainless steel casing. COMMENTS

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID. Not in radiation zone.

Geologist AVAILABLE LOGS

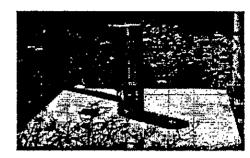
TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

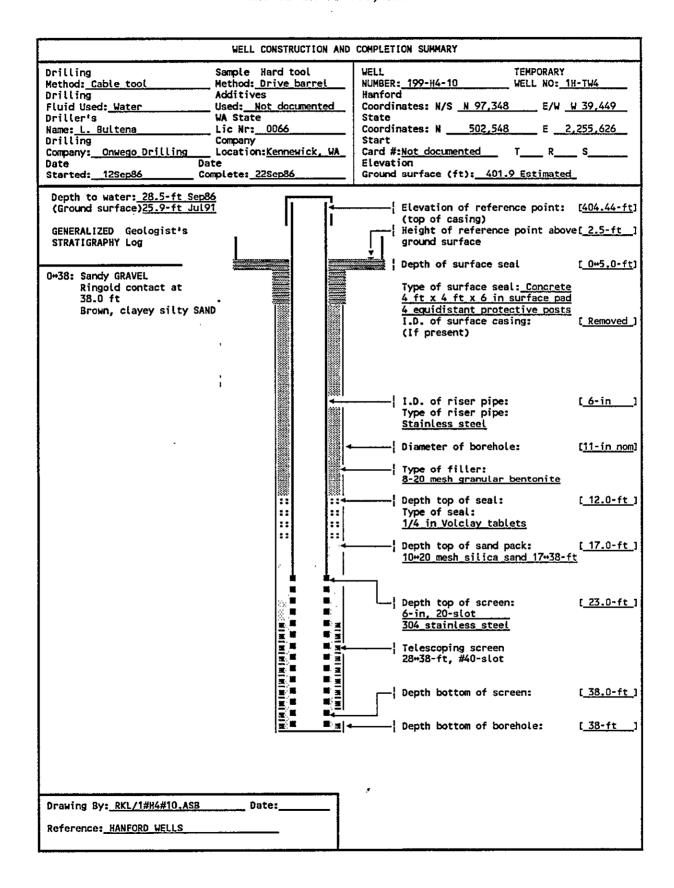
LISTED USE Water levels measured 20Nov86+01Aug91

PUMP TYPE Hydrostar

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-10

WELL DESIGNATION 199-H4-10

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 183-H Solar Evaporation Basins

N 97,348 W 39,449 N 502,548 E 2,255,626 HANFORD COORDINATES : LAMBERT COORDINATES :

Sep86 DATE DRILLED DEPTH DRILLED (GS) : 38.0-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

28.5.0-ft, Sep86; 25.9-ft, Jul91 6-in stainless steel, +2.5-23.0-ft CASING DIAMETER

ELEV TOP CASING 404.44-ft

401.9-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA

SCREENED INTERVAL 6-in stainless steel, #20-slot, 23+38-ft;

10-in telescoping,

#40-slot, 28+38-ft FIELD INSPECTION, 12Jun90; Stainless steel casing. COMMENTS

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID. Not in radiation zone.

AVAILABLE LOGS Geologist TV SCAN COMMENTS NA

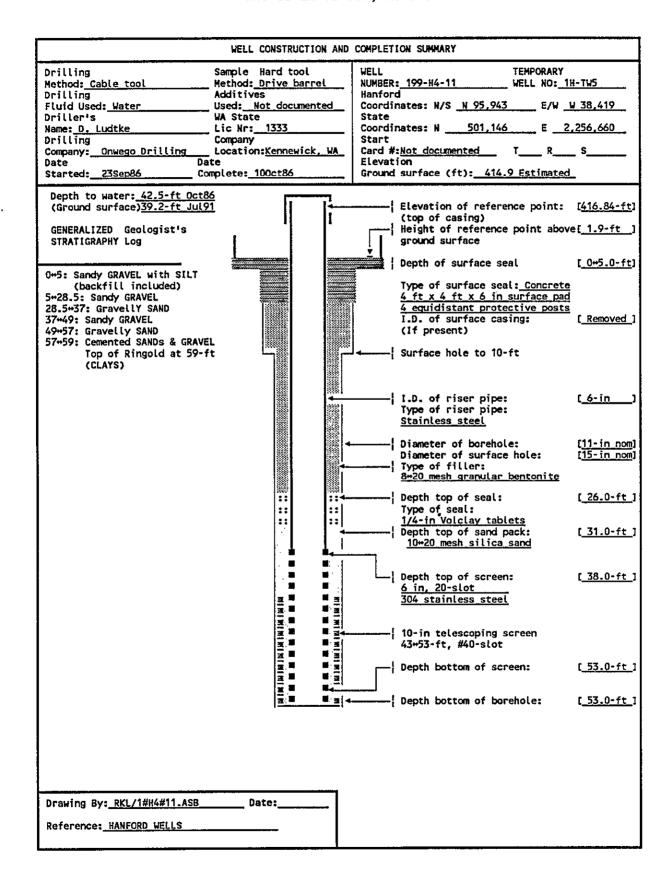
NA DATE EVALUATED **EVAL RECOMMENDATION:**

LISTED USE Water levels measured 20Nov86+26Jul91

PUMP TYPE Hydrostar

MAINTENANCE NĎ

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-11

199-H4-11 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY

183-H Solar Evaporation Basins N 95,943 W 38,419 N 501,146 E 2,256,660 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED 0ct86 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 53.0-ft

42.5.0-ft, Sep86; 39.2-ft, Jul91 6-in stainless steel, from +1.9-38.0-ft DEPTH TO WATER (GS) :

CASING DIAMETER

ELEV TOP CASING 416.84-ft

ELEV GROUND SURFACE : 414.9-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL

COMMENTS

6-in stainless steel, #20-slot, 38-53-ft;
10-in telescoping, #40-slot, 43-53-ft
FIELD INSPECTION, 12Jun90;
Stainless steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable.

Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

AVAILABLE LOGS Geologist TV SCAN COMMENTS NA : DATE EVALUATED NA EVAL RECOMMENDATION : NA

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LISTED USE : Water levels measured 20Nov86+26Jul91

PUMP TYPE Hydrostar MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-12A

199-H4-12A WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

183-H Solar Evaporation Basins RCRA FACILITY

N 96,549 W 38,854 N 501,751 E 2,256,223 HANFORD COORDINATES : LAMBERT COORDINATES :

Nov86 DATE DRILLED DEPTH DRILLED (GS) : 48.0-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

38.5-ft, Oct86; 35.2-ft, Jul91 6-in stainless steel, from ±2.5*33.0-ft CASING DIAMETER

413.50-ft ELEV TOP CASING ELEV GROUND SURFACE : 411.0-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL

6-in stainless steel, #20-slot, 33-48-ft; 10-in telescoping, #40-slot, 37.5-47.5-ft FIELD INSPECTION, 12Jun90; Stainless steel casing. 4-ft by 4-ft concrete

COMMENTS

pad, 4 posts, 1 removable.

Capped and locked, brass cap in pad

with well ID.

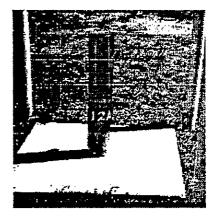
Not in radiation zone.

AVAILABLE LOGS Geologist TV SCAN COMMENTS NA DATE EVALUATED NA **EVAL RECOMMENDATION:** NA

Water levels measured 20Nov86+26Jul91 LISTED USE

PUMP TYPE Hydrostar

MAINTENANCE ND



WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Sample Hard tool Method: Cable tool Method: Drive barrel Drilling Additives Fluid Used: Water Used: Not documented Driller's WA State Name: D, Ludtke Lic Nr: 1333 Company: Onwego Drilling Company: Onwego Drilling Location: Kennewick, WA Date Date Started: 270ct86 Complete: 11Nov86	WELL TEMPORARY NUMBER: 199-H4-12B WELL NO: 1H-TC1B Hanford Coordinates: N/S N 96,568 E/W W 38,869 State Coordinates: N 501,770 E 2,256,208 Start Card #:Not documented T R S Elevation Ground surface (ft): 411.0 Estimated				
Depth to water: 37.0-ft Nov86 (Ground surface)35.2-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log 0*5: Silty, sandy GRAVEL 5*29: Sandy GRAVEL with CaCO ₃ cemented between grains 6-in med. SAND unit at 36-ft 38.5*42: Cemented sandy GRAVEL, decayed organics 42*49: Gravelly SAND 49*50.5: SAND 50.5*51: Ringold - silty SAND with CLAY and CALICHE Drawing By: RKL/1#H4#128.ASB Date:	Elevation of reference point: [413.52-ft] (top of casing) Height of reference point above[2.5-ft] ground surface ground surface popth of surface seal [0+5.0-ft]				
Reference: HANFORD WELLS					

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-12B

WELL DESIGNATION 199-H4-12B

CERCLA UNIT 100-Aggregate Area

183-H Solar Evaporation Basins N 96,568 W 38,869 N 501,770 E 2,256,208 RCRA FACILITY

HANFORD COORDINATES :

LAMBERT COORDINATES :

DATE DRILLED Nov86 51.0-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

37.0-ft, Nov86; 35.2-ft, Jul91 6-in stainless steel, +2.5-45.0-ft CASING DIAMETER

ELEV TOP CASING 413.52-ft ELEV GROUND SURFACE : 411.0-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL 6-in stainless steel, #20-slot, 45+50-ft;

FIELD INSPECTION, 12Jun90; COMMENTS

Stainless steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable.

Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA DATE EVALUATED NA **EVAL RECOMMENDATION:** NA

LISTED USE Water levels measured 20Nov86+26Jul91

PUMP TYPE Hydrostar

MAINTENANCE ND ٤Y

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-12C

199-H4-12C WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 183-H Solar Evaporation Basins

N 96,573 W 38,845 N 501,775 E 2,256,232 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED 0ct86 220.0-ft

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : ND

38.2-ft, Oct86; 31.8-ft, Jul91 6-in_stainless steel, +2.9+72.0-ft DEPTH TO WATER (GS) : CASING DIAMETER

413.52-ft ELEV TOP CASING

ELEV GROUND SURFACE : 410.6-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL 6-in stainless steel, #20-slot, 72+82-ft;

COMMENTS FIELD INSPECTION, 12Jun90;

Stainless steel casing. 4-ft by 4-ft concrete pad,

4 posts, 1 removable.
Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

AVAILABLE LOGS Geologist TV SCAN COMMENTS NA

NA DATE EVALUATED **EVAL RECOMMENDATION:** NA

LISTED USE Water levels measured 20Nov86+26Jul91

PUMP TYPE Hydrostar

MAINTENANCE NĎ

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-13

WELL DESIGNATION : 199-H4-13

CERCLA UNIT : 100-Aggregate Area

RCRA FACILITY : 183-H Solar Evaporation Basins

HANFORD COORDINATES: N 95,506 W 38,166
LAMBERT COORDINATES: N 500,710 E 2,256,914

DATE DRILLED : Nov86
DEPTH DRILLED (GS): 61.0-ft

MEASURED DEPTH (GS): ND

DEPTH TO WATER (GS): 42.0-ft, Nov86; 40.6-ft, Jul91
CASING DIAMETER: 6-in stainless steel, +2.2*37.0-ft

ELEV TOP CASING : 418.20-ft

ELEV GROUND SURFACE: 416.0-ft Estimated
PERFORATED INTERVAL: NA
SCREENED INTERVAL: 6-in stainless steel,
#20-slot, 37+52-ft

COMMENTS: FIELD INSPECTION, 12Jun90; Stainless steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

AVAILABLE LOGS : Geologist
TV SCAN COMMENTS : NA

TV SCAN COMMENTS : NA DATE EVALUATED : NA EVAL RECOMMENDATION : NA

LISTED USE : Water levels measured 20Nov86+26Jul91

PUMP TYPE : Hydrostar

MAINTENANCE : ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-14

199-H4-14 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY

183-H Solar Evaporation Basins N 96,024 W 39,529 N 501,224 E 2,255,550 HANFORD COORDINATES : LAMBERT COORDINATES :

Dec86 DATE DRILLED DEPTH DRILLED (GS) : 53.0-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

43.0-ft, Dec86; 40.0-ft, Jul91

6-in stainless steel, from +2.5+38.0-ft CASING DIAMETER

420.59-ft ELEV TOP CASING 418.1-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA

6-in stainless steel, 38*53-ft, #20-slot; 10-in telescoping, #40-slot, 43*53-ft FIELD INSPECTION, 12Jun90; SCREENED INTERVAL

COMMENTS

Stainless steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

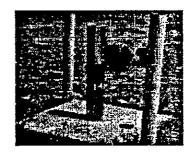
AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE Water levels measured 05Dec86*26Jul91

PUMP TYPE Hydrostar

MAINTENANCE NĎ



WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Sample Hard tool Method: Cable tool Method: Drive barrel Drilling Additives Fluid Used: Water Used: Not documented Driller's WA State Name: K. Olson Lic Nr: 1217 Drilling Company: Onwego Drilling Location: Kennewick, WA Date Date Started: 280ct86 Complete: 11Nov86	WELL TEMPORARY NUMBER: 199-H4-15A WELL NO: 1H-TC2A Hanford Coordinates: N/S N 97,012 E/W W 39,197 State Coordinates: N 502,213 E 2,255,879 Start Card #:Not documented T R S Elevation Ground surface (ft): 405.0 Estimated				
Depth to water: 32.8-ft Nov86 (Ground surface)29.0-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log 0+2: SAND & GRAVEL 2+5: SAND	Elevation of reference point: [407.21-ft] (top of casing) Height of reference point above[2.2-ft] ground surface Depth of surface seal [0+5.0-ft] Type of surface seal: Concrete				
5+14: SAND, GRAVEL & BOULDERS 14+19: GRAVEL with SAND & BOULDERS 19+46: Sandy GRAVEL Ringold Fm. at 44-ft	4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts 1.D. of surface casing: [Removed] (If present) Surface hole to 10 ft 15-in nominal diameter				
	I.D. of riser pipe: [_6-in] Type of riser pipe: Stainless steel				
	Type of filler: 8*20 mesh granular bentonite				
	Depth top of seal: [17.0-ft] Type of seal: 1/4-in Volclay tablets Depth top of sand pack: [22.0-ft]				
	10-20 mesh silica sand Depth top of screen: [27.0-ft] 6-in, 20-slot 304 stainless steel				
	10-in telescoping screen 32-42-ft, #40-slot				
	_[Depth bottom of screen: [42.0-ft]				
	Depth bottom of borehole: [<u>46,0-ft</u>]				
Drawing By: RKL/1#H4#15A.ASB Date: Reference: HANFORD WELLS					

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-15A

WELL DESIGNATION 199-H4-15A

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY

183-H Solar Evaporation Basins N 97,012 W 39,197 N 502,213 E 2,255,879 HANFORD COORDINATES : LAMBERT COORDINATES :

Nov86 DATE DRILLED DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): 46.0-ft

32.8-ft, Nov86; 29.0-ft, Jul91 6-in stainless steel, +2.2+27.0-ft CASING DIAMETER

407.21-ft ELEV TOP CASING ELEV GROUND SURFACE :

405.0-ft Estimated

PERFORATED INTERVAL : NA

6-in stainless steel, 27-42-ft, #20-slot; 10-in telescoping, #40-slot, 32-42-ft FIELD INSPECTION, 12Jun90; Stainless steel casing. SCREENED INTERVAL

COMMENTS

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

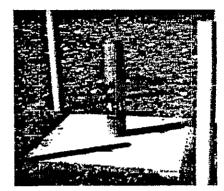
Not in radiation zone.

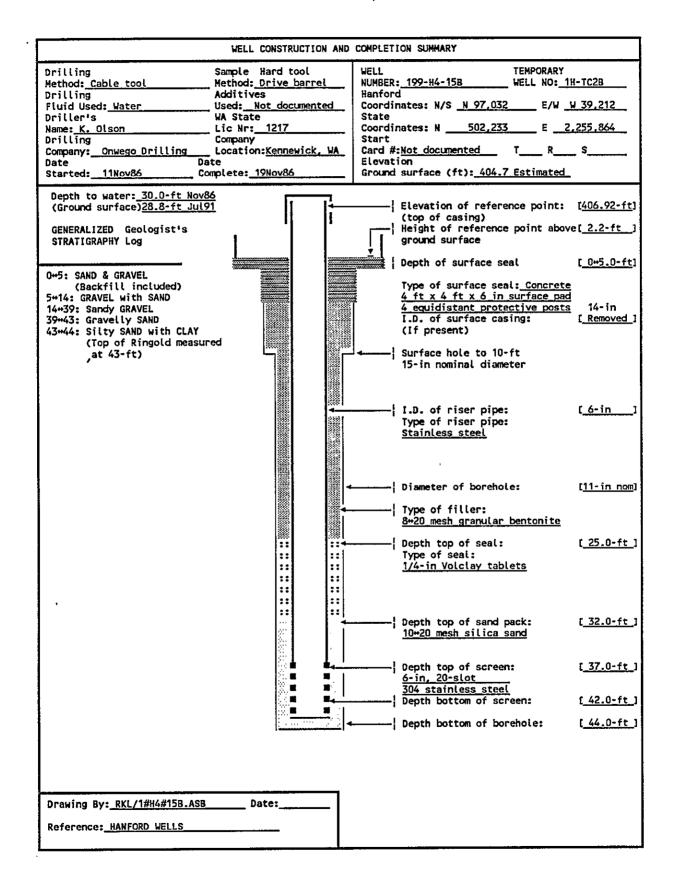
AVAILABLE LOGS Geologist

NA TV SCAN COMMENTS DATE EVALUATED NA EVAL RECOMMENDATION :

Water levels measured 20Nov86+26Jul91 LISTED USE

Hydrostar PUMP TYPE MAINTENANCE NĎ ..





SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-15B

199-H4-15B WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

183-H Solar Evaporation Basins N 97,032 W 39,212 RCRA FACILITY

HANFORD COORDINATES : N 502,233 E 2,255,864 LAMBERT COORDINATES :

Nov86 DATE DRILLED 44.0-ft DEPTH DRILLED (GS) : MEASURED DEPTH (GS) :

DEPTH TO WATER (GS) : 30.0-ft, Nov86; 28.8-ft, Jul91 6-in stainless steel, +2.2-37.0-ft CASING DIAMETER

406.92-ft ELEV TOP CASING

ELEV GROUND SURFACE : 404.7-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL 6-in stainless steel,

37-42-ft, #20-slot FIELD INSPECTION, 12Jun90; COMMENTS

Stainless steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

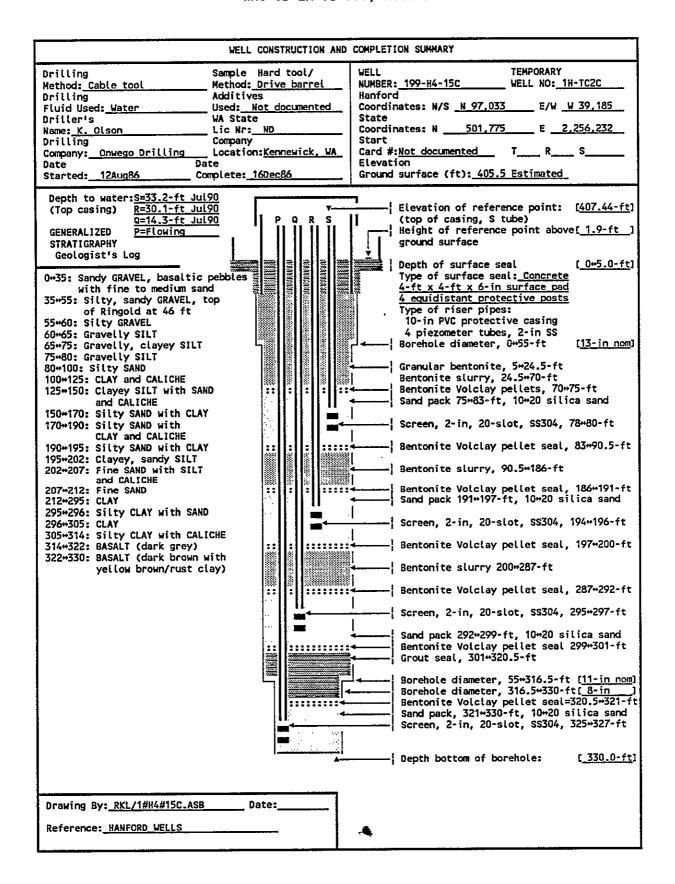
Geologist AVAILABLE LOGS

TV SCAN COMMENTS NA DATE EVALUATED EVAL RECOMMENDATION : NA

Water levels measured 20Nov86+26Jul91 LISTED USE

PUMP TYPE Hydrostar

MAINTENANCE



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-15C

199-H4-15C WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 183-H Solar Evaporation Basins

N 97,033 W 39,185 N 501,775 E 2,256,232 HANFORD COORDINATES : LAMBERT COORDINATES :

Dec86 DATE DRILLED 330.0-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : ND DEPTH TO WATER (GS) : S=33.2-ft, Jul90;

R=30.1-ft, Jul90; q=14.3-ft, Jul90;

P=Flowing

4, 2-in piezometer tubes, CASING DIAMETER

S=+1.9*78-ft; R=+1.9*194-ft; Q=+1.8*295-ft; P=+1.6*325-ft

S=407.44-ft; R=407.37-ft; Q=407.27-ft; P=407.07-ft ELEV TOP CASING

ELEV GROUND SURFACE : 405.5-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL

S=2-in stainless steel, 78-80-ft, 20-slot; R=2-in stainless steel, 194-196-ft, 20-slot Q=2-in stainless steel, 295-297-ft, 20-slot P=2-in stainless steel, 325-327-ft, 20-slot

FIELD INSPECTION, 12Jun90; COMMENTS

Stainless steel casing with 4 stainless steel 2-in piezometers.

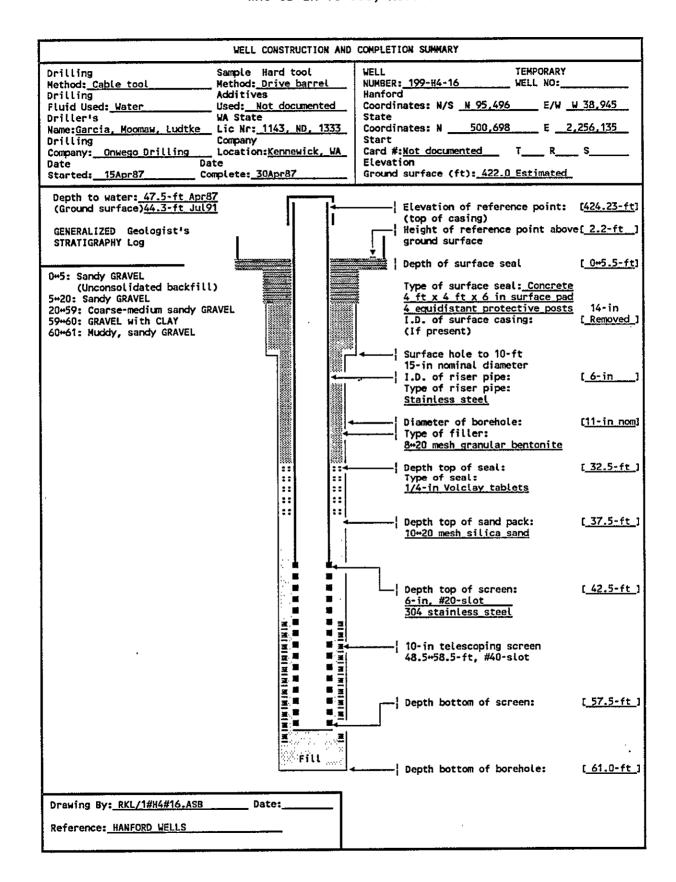
4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone. Geologist AVAILABLE LOGS

TV SCAN COMMENTS NA

NA DATE EVALUATED NA EVAL RECOMMENDATION : LISTED USE None PUMP TYPE None MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-16

199-H4-16 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY

183-H Solar Evaporation Basins N 95,496 W 38,945 N 500,698 E 2,256,135 HANFORD COORDINATES : LAMBERT COORDINATES :

Apr87 DATE DRILLED 61.0-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 47.5-ft, Apr87; 44.3-ft, Jul91 6-in stainless steel, +2.2+42.5-ft CASING DIAMETER

ELEV TOP CASING 424.23-ft

ELEV GROUND SURFACE : 422.0-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL 6-in stainless steel,

#20-slot; 42.5+57.5-ft 10-in telescoping, #40-slot, 48.5*58.5-ft FIELD INSPECTION, 12Jun90;

COMMENTS

Stainless steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable. Capped and locked, brass cap in pad with well ID. Not in radiation zone.

AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA DATE EVALUATED NA **EVAL RECOMMENDATION:**

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LISTED USE Water levels measured 07May87+26Jul91

Hydrostar PUMP TYPE

MAINTENANCE ND

WELL	CONSTRUCTION AND	COMPLETION SUMMARY	
Method: Cable tool Method: Drilling Additiv Fluid Used: Water Used: Driller's WA Stat	Not documented te: 1333, ND yon: Kennewick, WA	WELL TEMPORARY NUMBER: 199-H4-17 WELL NO: Hanford Coordinates: N/S N 96,961 E/W State Coordinates: N 502,162 E 2 Start Card #:Not documented T R Elevation Ground surface (ft): 417.2 Estimated	,255,469 _ \$
Depth to water: 41.5-ft May87 (Ground surface)40.3-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log		Elevation of reference point: (top of casing) Height of reference point abov	
0+18: Sandy GRAVEL 18+22: Sandy GRAVEL, many BOULDERS 22+34: Sandy GRAVEL, consolidated 34+45: Consolidated, gray silty GRAVEL 45: Ringold-consolidated		Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts I.D. of surface casing: (If present)	
silty sandy GRAVEL		Surface hole to 10-ft 15-in nominal diameter I.D. of riser pipe: Type of riser pipe: Stainless steel Diameter of borehole:	[<u>6-in</u>]
		Type of filler: 8*20 mesh granular bentonite	(25.0-ft 1
		Depth top of sand pack: 10→20 mesh silica sand	[<u>30.0-ft</u>]
		Depth top of screen: 6-in, 20-slot 304 stainless steel	[<u>35.0-ft</u>]
		Depth bottom of screen:	[<u>45.0-ft</u>]
		Depth bottom of borehole:	[46.5-ft]
	Date:		
Reference: HANFORD WELLS			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-17

WELL DESIGNATION 199-H4-17

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 183-H Solar Evaporation Basins

N 96,961 W 39,607 N 502,162 E 2,255,469 May87 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : 46.5-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

41.5-ft, May87; 40.3-ft, Jul91 6-in stainless steel, +1.9-35.0-ft CASING DIAMETER

419.09-ft ELEV TOP CASING

417.2-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : НA

6-in stainless steel, SCREENED INTERVAL #20-slot, 35+45-ft

COMMENTS FIELD INSPECTION, 12Jun90;

Stainless steel casing. 4-ft x 4-ft concrete pad,

4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 13May87+26Jul91 LISTED USE

PUMP TYPE Hydrostar

MAINTENANCE ND

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WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Sample Hard tool Method: Cable tool Method: Drive barrel Drilling Additives Fluid Used: Water Used: Not documented Driller's WA State Name: Ludtke Lic Nr: 1333 Drilling Company Company: Onwego Drilling Location: Kennewick, WA Date Date Started: 12May87 Complete: 26May87 Depth to water: 45,0-ft May87 (Ground surface)42.6-ft Ju191	WELL TEMPORARY NUMBER: 199-H4-18 WELL NO: Hanford Coordinates: N/S N 96,036 E/W W 38,825 State Coordinates: N 501,238 E 2,255,254 Start Card #:Not documented T R S Elevation Ground surface (ft): 419.6 Estimated
GENERALIZED Geologist's STRATIGRAPHY Log	(top of casing) Height of reference point above(2.2-ft] ground surface
0+6: Sandy GRAVEL 6+7: CONCRETE 10+12: Sandy GRAVEL 12+12: Large COBBLES & small BOULDERS 12+15: Poorly sorted sandy GRAVEL, decreasing in overall grain size with depth 40+49: Sandy GRAVEL, cemented and consolidated 49+49: Ringold Fm sandy GRAVEL with CLAY and some CALICHE	Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts I.D. of surface casing: (If present) [Co+4.5-ft] [Co+4.5-ft] [Co+4.5-ft] [Co+4.5-ft]
	Surface hole to 10-ft 15-in nominal diameter I.D. of riser pipe: Type of riser pipe: Stainless steel
	Diameter of borehole: [11-in nom] Type of filler: 8*20 mesh granular bentonite
	Depth top of seal: [28.5-ft] Type of seal: 1/4-in Volclay tablets
	Depth top of sand pack: [34.0-ft] 10+20 mesh silica sand
	Depth top of screen: [40.0-ft] 6-in, #20-slot 304 stainless steel
	Depth bottom of screen: [_50.0-ft_]
<u></u>	Depth bottom of borehole: [51.0-ft]
Drawing By: RKL/1#H4#18.ASB Date:	
Reference: HANFORD WELLS	

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-H4-18

WELL DESIGNATION 199-H4-18

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 183-H Solar Evaporation Basins

N 96,036 W 38,825 N 501,238 E 2,255,254 HANFORD COORDINATES : LAMBERT COORDINATES :

May87 DATE DRILLED 51.0-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

45.0-ft, May87; 42.6-ft, Jul91 6-in stainless steel, +2.2-40.0-ft CASING DIAMETER

421.82-ft ELEV TOP CASING 419.6-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA 6-in stainless steel, SCREENED INTERVAL #20-slot, 40+50-ft

FIELD INSPECTION, 12Jun90; COMMENTS

Stainless steel casing. 4-ft by 4-ft concrete pad,

4 posts, 1 removable. Capped and locked, brass cap in pad with well ID.

Not in radiation zone.

AVAILABLE LOGS Geologist TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 15Jun87+26Jul91 LISTED USE

PUMP TYPE Hydrostar

NĎ MAINTENANCE

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	WELL CONSTRUCTION AND	COMPLET	ON SUMMARY	
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Name: Row Drilling Company: Not documented Date Started: 23Jun52	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documented Date Complete: 06Aug52	Hanford Coordin State Coordin Start Card #: Elevati	nates: N/S N 76,100 E/W nates: N 481,200 E 2	w 68,800 2,226,300 ss
Depth to water: 74.2-ft Au (Ground surface) 70.0-ft Me GENERALIZED Driller's STRATIGRAPHY Log 0+3: TOP SOIL 3+30: GRAVEL and SAND, hit BG at 3 ft and 8 ft 30+40: Sandy SILT 40+45: Sandy SILT and GRAVEL 45+46: GRAVEL, no SILT 46+70: Cement GRAVEL and SAND 70+75: Cement GRAVEL and SAND 84+89: 75% coarse SAND and 25 84+89: 75% coarse SAND and 25 84+89: 75% coarse SAND and 25 84+99: 80% GRAVEL, 20% GRAVEL 96+97: 95% SAND and 5% GRAVEL 96+97: 95% SAND and 5% GRAVEL 97+97.5: SAND 97.5=102: 60% SAND and 40% GI 102+104: 98% SAND 104+106.5: 70% GRAVEL and 30% 115+126: 70% GRAVEL and 30% 115+126: 70% GRAVEL and 10% 132.5=133: 60% GRAVEL and 40% 133-136: 90% GRAVEL and 10% 136+140: 80% GRAVEL and 20% 140+150: 80% GRAVEL and 20% 140+150: 80% GRAVEL and 20% 156+160: 70% GRAVEL and 50% 15	XULDER XULDER XX GRAVEL X SAND X S	<u></u>	Elevation of reference point: (top of casing) Height of reference point aborground surface Depth of surface seal: Type of surface seal: None documented I.D. of surface casing (If present) I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole: Type of filler: Not documented Depth top of perforations: Description of perforations: 12 holes/ft Depth bottom of casing: Depth bottom of borehole:	Ve[_0.5-ft_] [_ND] [_ND] [_12-0-in] [_13-in_nom]
Drawing By: RKL/1#K#10.ASB Reference: HANFORD WELLS	Date:			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-10

199-K-10 WELL DESIGNATION 100-KR-2 CERCLA UNIT

RCRA FACILITY NA

76,100 W 68,800 HANFORD COORDINATES : N N 481,200 E 2,226,300 LAMBERT COORDINATES :

Jun+Aug52 DATE DRILLED DEPTH DRILLED (GS) : 170-ft

MEASURED DEPTH (GS) : 74-ft, Aug52; "70-ft, May61 12-in, +0.5-170-ft DEPTH TO WATER (GS) :

CASING DIAMETER

466.66-ft ELEV TOP CASING 466.2-ft Estimated ELEV GROUND SURFACE :

155+170-ft PERFORATED INTERVAL :

SCREENED INTERVAL : FIELD INSPECTION, 26Feb91, COMMENTS

Carbon steel casing,

no pad, no posts, capped with welded plate.

No permanent identification. Not in radiation zone.

OTHER: Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE Not sampled 1989;

water level measured 10May61

PUMP TYPE None MAINTENANCE

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	WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Name: Gentz Drilling Company: Not documented Date Started: 15Jul52	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location:Not documented Date Complete: 09Aug52	Hanford Coordinates: N/S N 76,030 E/W W 68,733 State Coordinates: N 481,155 E 2,226,397 Start
Depth to water: 73.0-ft Au (Ground surface) 70.2-ft Au GENERALIZED Driller's STRATIGRAPHY Log	952 4	Elevation of reference point: [467.66-f (top of casing) Height of reference point above[_1,7-ft ground surface
0+15: BOULDERS 15+20: BOULDERS and GRAVEL 20+28: Coarse GRAVEL		Type of surface seal: None documented
28+35: 75% GRAVEL with 25% SA 35+42: SAND and SILT 42+45: SAND and SILT 45+50: SAND, SILT and coarse 50+55: 50% GRAVEL and 50% SAN	GRAVEL.	I.D. of surface casing [_ND (If present)
55+65: Cement GRAVEL 65+80: Coarse GRAVEL 80+85: GRAVEL and SAND 85+97: GRAVEL, SAND and a lit 97+105: SAND and coarse GRAVE	tie SILT	I.D. of riser pipe:
105+110: GRAVEL and a little 110+115: Coarse GRAVEL 115+118: GRAVEL and SAND 118+120: PEBBLES and a little 120+130: PEBBLES, GRAVEL and 130+140: GRAVEL and SAND 140+164: Coarse GRAVEL 165+170: SAND and SILT 170 : CLAY REMEDIATION: Jun74, by Bultena	SAND SAND SAND	Type of filler: Not documented Depth top of perforations: 99-90-ft 4 holes/ft 110-135 and 150-160-ft
Perforated 69+90-ft		cuts not documented Depth to bottom, 126.6-ft
		Depth bottom of perforations: [160-ft
Drawing By: RKL/1#K#11.ASB Reference: HANFORD WELLS	Date:	Depth bottom of barehole: [170-ft

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-11

199-K-11 WELL DESIGNATION 100-KR-2 CERCLA UNIT : RCRA FACILITY NA

HANFORD COORDINATES : 76,030 W 68,733 N 481,155 E 2,226,397 LAMBERT COORDINATES :

DATE DRILLED Jul+Aug52 DEPTH DRILLED (GS) : 170-ft

126.6-ft, 01Aug91 73-ft, Aug52; 70.2-ft, 01Aug91 MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

6-in, +1.7+170-ft CASING DIAMETER ELEV TOP CASING 467.66-ft ELEV GROUND SURFACE : 466.0-ft Estimated

69+160-ft PERFORATED INTERVAL :

SCREENED INTERVAL

FIELD INSPECTION, 25Feb91, COMMENTS Carbon steel casing,

pump hanger holes, no pad, no posts, capped, and locked. No permanent identification. Not in radiation zone.

OTHER: AVAILABLE LOGS Driller

07Jun91, depths referenced to ground surface; TV SCAN COMMENTS

Depth to bottom: 120.4-ft, silty.

Depth to water: 68.9-ft, some floating debris. Water clear, some dislodged scale

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and suspended debris.

Vadose casing clean; submerged casing has quite a lot of scale in spots. Perforations start at 70.2-ft+not determined. Some perfs were visible

almost to the bottom, they were open. The well needs to be cleaned.

24Jul91;

Depth to bottom: 126.0-ft, sand and gravel. Depth to water: 69.6-ft, some floating debris. Water clear.

Vadose casing clean, some pitting just above water; submerged casing clean. Perforations start at 68.6-ft to not determined, 4 cuts/rd/ft. The well looked real clean.

DATE EVALUATED NA

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EVAL RECOMMENDATION : NA

NA Sampled 1989 for ³H, U, ⁹⁰Sr, NO₃, Cr; water levels measured 10May61+18Jun90 LISTED USE

Electric submersible, intake set at 79.97-ft (top-of-casing) PUMP TYPE

06Jun91; Pulled pump. No contamination encountered. 07Jun91; TV run. MAINTENANCE

08Jul91; Brushed casing and cleaned debris with sand pump and bailer.

18Jul91; Developed well by pumping to <5 NTU. 24Jul91; TV run.

01Aug91; Installed electric submersible pump.

WELL CONSTRUCTION AND COMPLETION SUMMARY				
Orilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Name: Row Drilling Company: Not documented Date Started: 15Aug52	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documented Date Complete: 11Sep52	WELL NUMBER: 199-K-12 Hanford Coordinates: N/S N 76,104 State Coordinates: N 481,229 E 2, Start Card #:Not documented Ground surface (ft): Not documented	. 68,803 .226,327	
Depth to water: 73.5-ft Se (Ground surface) GENERALIZED Driller's STRATIGRAPHY Log O+10: TOP SOIL and GRAVEL 10+15: 80% GRAVEL, 15% SAND, BOULDERS at 10+12 and 15+35: 90% GRAVEL and 10% SAN 35+39: GRAVEL, SAND and SILT 39+85: Cement GRAVEL BOULDER 41+42 ft (Hard 85+105: 75% SAND, 25% GRAVEL 105+115: Cement GRAVEL and SILT 15+125: SAND, GRAVEL and SILT 125+148: GRAVEL, SAND and SILT 148+159: SAND and GRAVEL	& 5% SILT 15 ft 4D 4AND	Elevation of reference point:		
		Type of filler: Not documented Depth top of perforations: Description of perforations: 117*137-ft, 4 holes/ft Depth bottom of perforations	[<u>117-ft</u>]	
		Depth bottom of casing:	[<u>7155-ft</u>]	
Drawing By: RKL/1#K#12.ASB Reference: HANFORD WELLS	Date:			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-12

WELL DESIGNATION 100-KR-3 CERCLA UNIT RCRA FACILITY NA

N 76,104 W 68,803 N 481,229 E 2,226,327 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Aug+Sep52 159-ft DEPTH DRILLED (GS) : ND

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

CASING DIAMETER

73-ft, Sep52 6-in, from ND+~155-ft ND, 466.55-ft before covered over ELEV TOP CASING ELEV GROUND SURFACE : ND

PERFORATED INTERVAL : 117+137-ft

SCREENED INTERVAL : NA

No FIELD INSPECTION, covered over COMMENTS

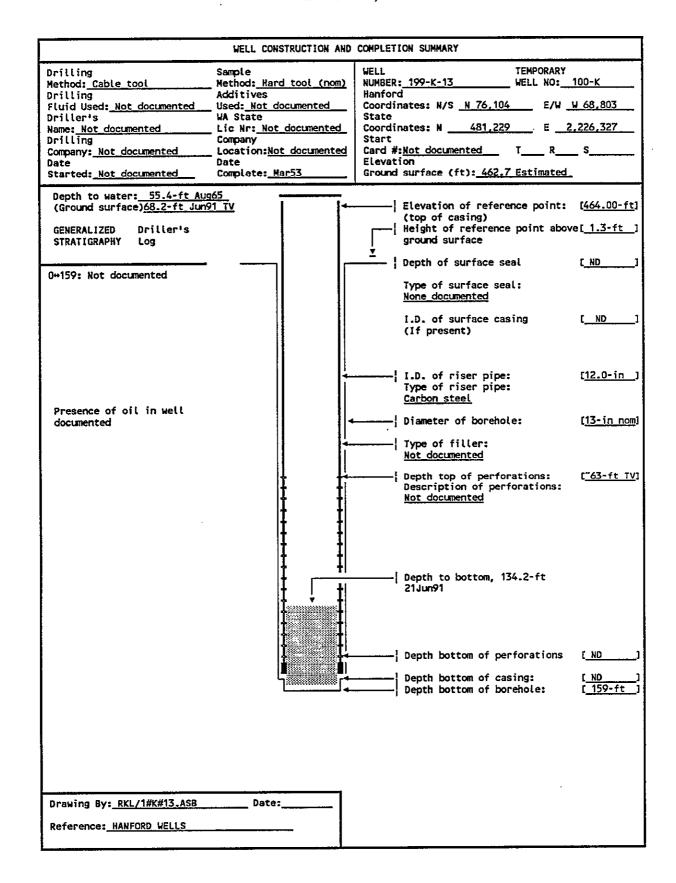
OTHER: AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA

EVAL RECOMMENDATION : NA LISTED USE None documented :

PUMP TYPE None MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-13

199-K-13 WELL DESIGNATION 100-KR-1 CERCLA UNIT RCRA FACILITY ΝA

76,104 W 68,803 HANFORD COORDINATES : N N 481,229 E 2,226,327 LAMBERT COORDINATES :

Mar53 DATE DRILLED 159-ft

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

134.2-ft, 21Jun91 TV 55.4-ft, Aug65; 68.2-ft, 21Jun91 TV 12-in, +1.3-ft+ND

CASING DIAMETER

ELEV TOP CASING 464.00-ft

ELEV GROUND SURFACE : 462.7-ft Estimated

PERFORATED INTERVAL : SCREENED INTERVAL NA

FIELD INSPECTION, 26Feb91, COMMENTS

Carbon steel casing, no pad, no posts, capped with flat plate, not locked.

No permanent identification. Not in radiation zone.

OTHER: Presence of oil in well documented, (McGhan 1989).

Driller AVAILABLE LOGS

TV SCAN COMMENTS 21Jun91, depths referenced to ground surface;

Depth to bottom: 134.2-ft, condition not determined.

Depth to water: 68.2-ft, murky with dislodged scale and suspended debris.

Vadose casing had corrosion/scale/rust; submerged casing heavy corrosion/scale/rust. Perforations start at 63-ft to not determined. The casing is so large that

below water the camera couldn't see much except near the camera. The weil

needs cleaning.

DATE EVALUATED EVAL RECOMMENDATION : NA

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Not sampled 1989: LISTED USE

water levels measured 17Aug65+09Apr90

PUMP TYPE No pump

MAINTENANCE 21Jun91; TV run

	WELL CONSTRUCTION AND	COMPLETION SUMMARY	
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Name: Gentz Drilling Company: Not documented Date Started: 12Nov52	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documented Date Complete: 03Dec52	WELL TEMPORARY NUMBER: 199-K-14 WELL NO: Hanford Coordinates: N/S ND E/W State Coordinates: N ND E Start Card #:Not documented T R Elevation Ground surface (ft): Not documented	ND ND _ S
Depth to water: 79.0-ft De (Ground surface) GENERALIZED Driller's STRATIGRAPHY Log 0-5: SAND, GRAVEL and BOULDER 5+10: BOULDERS 10+13: BOULDERS and GRAVEL 13+15: Coarse GRAVEL 15+22: BOULDERS and GRAVEL 22+30: SAND and coarse GRAVEL 30+37: SAND and GRAVEL 37+45: Coarse GRAVEL and SAND 45+48: SAND and GRAVEL 48+55: Pure GRAVEL 55+65: SAND and GRAVEL 65+67: Small GRAVEL and SAND 67+85: GRAVEL and SAND 85+90: GRAVEL and fine SAND 90+95: Coarse GRAVEL and SAND 90+95: Coarse GRAVEL and SAND	S	Elevation of reference point:	
Drawing By: RKL/1#K#14.ASB Reference: HANFORD WELLS	Date:		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-14

WELL DESIGNATION : 199-K-14
CERCLA UNIT : 100-KR-4
RCRA FACILITY : NA

HANFORD COORDINATES: N ND W ND LAMBERT COORDINATES: N ND E ND

DATE DRILLED : Nov*Dec52
DEPTH DRILLED (GS): 95-ft
MEASURED DEPTH (GS): NO
DEPTH TO WATER (GS): 79-ft Dec52
CASING DIAMETER : 6-in, ND*95 ft
ELEV TOP CASING : 469.05-ft

ELEV TOP CASING : 469.
ELEV GROUND SURFACE : ND
PERFORATED INTERVAL : ND
SCREENED INTERVAL : NA

COMMENTS: No FIELD INSPECTION, location not documented

AVAILABLE LOGS : Driller
TV SCAN COMMENTS : NA
DATE EVALUATED : NA
EVAL RECOMMENDATION : NA
LISTED USE : None

PUMP TYPE : No pump documented

MAINTENANCE : ND

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	WELL CONSTRUCTION AND	COMPLETION SUMMARY	
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Name: Not documented Drilling Company: Not documented Date	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documented Date	WELL TEMPORARY NUMBER: 199-K-15 WELL NO: Hanford Coordinates: N/S N 77,160 E/W State Coordinates: N 482,284 E Start Card #:Not documented T R Elevation	USED TH.#1 W 69,050 2,226,077
Started: Not documented	Complete: Mar53	Ground surface (ft): Not documented	
Depth to water: Not documen (Ground surface) GENERALIZED Driller's STRATIGRAPHY Log	ted	Elevation of reference point: (top of casing) Height of reference point abo ground surface	ve [<u>ND</u>]
0+150: Not documented		Type of surface seal None documented	[<u>ND</u>]
		<pre>I.D. of surface casing (If present)</pre>	[<u>0M</u>]
		Type of riser pipe: Carbon steel	[<u>6.0-in</u>]
•,			(<u>7-in nom</u>)
		Type of filler: Not documented	
		Depth top of perforations: Description of perforations: Not documented	[<u>ND _ </u>]
		Depth bottom of perforations Depth bottom of casing: Depth bottom of borehole:	[<u>ND</u>] [<u>ND</u>] [<u>150-ft</u>]
Drawing By: RKL/1#K#15.ASB Reference: HANFORD WELLS	Date:		

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-15

WELL DESIGNATION 199-K-15 100-KR-2 CERCLA UNIT

RCRA FACILITY NA

N 77,160 W 69,050 N 482,284 E 2,226,077 HANFORD COORDINATES : LAMBERT COORDINATES :

Mar53 DATE DRILLED DEPTH DRILLED (GS) : 150-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND ND

6-in, ND+150 ft CASING DIAMETER 408.00-ft

ELEV TOP CASING : ELEV GROUND SURFACE : ND ND PERFORATED INTERVAL : SCREENED INTERVAL : NA

COMMENTS No FIELD INSPECTION, unable to locate

OTHER:

No drill records AVAILABLE LOGS

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA LISTED USE None

No pump documented PUMP TYPE

MAINTENANCE ND

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	WELL CONSTRUCTION	AND CO	MPLETI	ON SUMMARY	
Drilling Method: Cable tool	Sample Method: Hard tool (no		ELL	TEMPORARY 199-K-16 WELL NO:	
Drilling	Additives		lanford		
Fluid Used: Not documented	Used: Not documented			nates: N/S N 76,300 E/W	<u>W_68,800</u>
Driller's Name: Gentz	WA State Lic Nr: Not documente		tate	nates: N <u>481,400</u> , E _	2 224 700
Drilling	Company	u s	tart	18ces: N401,400, E	2,220,300
Company: Not documented	Location: Not document			Not documented T R	S
Date	Date		levati		
Started: 04Feb53	Complete: 10Feb53	— G	round	surface (ft): Not documented	_
Depth to water: Not document (Ground surface)	ed I		1	Elevation of reference point:	r/0/ 00-f+1
(dround surrace)	-	li	- 1	(top of casing)	[404:00-16]
GENERALIZED Driller's STRATIGRAPHY Log		<u> </u>	 1	Height of reference point aboground surface)ve(<u>ND</u>]
0+12: BOULDERS and GRAVEL	 	<u> </u>	<u>-</u>	Depth of surface seal	[<u>ND</u>]
12+14: GRAVEL 14+20: Pea GRAVEL and SAND				Type of surface seal: None documented	
20+23: Coarse GRAVEL up to 1. 23+25: Coarse GRAVEL up to 3- 25+27: Small and coarse GRAVE	in			I.D. of surface casing (If present)	[<u>ND</u>]
with a little SAND 27*30: Coarse GRAVEL and pea 30*35: Small and coarse GRAVE 35*42: Coarse GRAVEL and SAND 42*44: GRAVEL runs from 3/4-i	L and SAND				
up to 3-in 44+50: Coarse GRAVEL and SAND			•	I.D. of riser pipe: Type of riser pipe: Carbon steet	(<u>8.0-in</u>]
				Diameter of borehole:	[<u>9-in nom</u>]
			•	Type of filler: Not documented	
			•	Depth top of perforations: Description of perforations: None documented	[<u>ND</u>]
				Depth bottom of perforations:	<u> [ND _]</u>
		i ll←		Depth bottom of casing: Depth bottom of borehole:	[<u>50-ft</u>] [<u>50-ft</u>]
Drawing By: RKL/1#K#16.ASB	Date:	1			
Reference: HANFORD WELLS	······································				

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-16

WELL DESIGNATION : 199-K-16 CERCLA UNIT : 100-KR-2 RCRA FACILITY : NA

HANFORD COORDINATES: N 76,300 W 68,800 LAMBERT COORDINATES: N 481,400 E 2,226,300

DATE DRILLED : Feb53
DEPTH DRILLED (GS): 50-ft
MEASURED DEPTH (GS): ND
DEPTH TO WATER (GS): ND

CASING DIAMETER : 6-in, from ND+50-ft

ELEV TOP CASING : 404.00-ft
ELEV GROUND SURFACE : ND

ELEV GROUND SURFACE: ND PERFORATED INTERVAL: ND SCREENED INTERVAL: NA

COMMENTS : No FIELD INSPECTION, unable to locate

AVAILABLE LOGS : Driller
TV SCAN COMMENTS : NA

DATE EVALUATED : NA EVAL RECOMMENDATION : NA

LISTED USE : Not sampled 1989
PUMP TYPE : None documented

MAINTENANCE : ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-17

WELL DESIGNATION : 199-K-17
CERCLA UNIT : 100-KR-4
RCRA FACILITY : NA
HANFORD COORDINATES : N ND

HANFORD COORDINATES: N ND W ND LAMBERT COORDINATES: N ND E ND DATE DRILLED: Augmsep53
DEPTH DRILLED (GS): 75-ft
MEASURED DEPTH (GS): ND

DEPTH TO WATER (GS): 62-ft Sep53
CASING DIAMETER: 8-in, from ND+75-ft
ELEV TOP CASING: 406.00-ft

ELEV TOP CASING : 406.00-ft ELEV GROUND SURFACE : ND PERFORATED INTERVAL : 50+75-ft

SCREENED INTERVAL : NA
COMMENTS : NO FIELD INSPECTION, location not documented

AVAILABLE LOGS : Driller
TV SCAN COMMENTS : NA
DATE EVALUATED : NA

EVAL RECOMMENDATION : NA LISTED USE : Not sampled 1989 PUMP TYPE : No pump documented

MAINTENANCE : ND

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WELL CON	STRUCTION AND	COMPLETI	ON SUMMARY		
Drilling Additives Fluid Used: Not documented Used: Not d Driller's WA State Name: Gentz Lic Nr: Not Drilling Company	documented	Hanford Coordin State Coordin Start Card #: Elevati	199-K-18 ates: N/S <u>ND</u> ates: N <u>ND</u>	EN	D D
Depth to water: 52.0-ft Oct54 (Ground surface) 15.8-ft Jul91 TV GENERALIZED Driller's STRATIGRAPHY Log 0*14: BACKFILL and GRAVEL 14*16: 75% coarse GRAVEL,		<u>-</u>	Elevation of referen (top of casing) Height of reference ground surface Depth of surface sea Type of surface seal None documented	point above	
25% fine and coarse SAND 17*18: 75% GRAVEL, 25% fine SAND 18*19: 50% GRAVEL, 50% fine SAND 19*21: 85% fine SAND, 15% GRAVEL 21*25: 75% SAND, 25% GRAVEL 25*31: 90% GRAVEL, 10% fine SAND 31*35: 85% coarse GRAVEL, 15% fine SAND 35*38: Fine SAND			I.D. of surface casi (If present)	ing	[<u>ND</u> 3
38+39: 75% coarse GRAVEL, 25% fine SAND 39+41: 90% coarse GRAVEL, 10% fine SAND 41+44: 80% coarse GRAVEL, 20% fine SAND 44+45: 90% GRAVEL and COBBLES, 10 % fine 45+46: 75% coarse GRAVEL and COBBLES, 25% fine SAND 46+48: 95% coarse GRAVEL, 5% fine SAND			I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole		[<u>8.0-in</u>]
48+49: 75% GRAVEL and COBBLES, 25% fine SAND 50+50: 90% fine SAND, 10% coarse SAND 50+51: 80% small and coarse GRAVEL, 20% fine SAND 51+52: 80% coarse SAND, 20% coarse GRAVEL 52+55: 80% coarse GRAVEL, 20% fine SAND 55+56: 70% small coarse GRAVEL 30% fine SAND			Depth top of perfora Description of perfo Not documented		(<u>~18-ft_TV</u>)
56+59: 85% small coarse GRAVEL 15% SAND 59+60: 75% coarse GRAVEL, 25% fine SAND DRILLER'S NOTE: Water from 13+49-ft. Apparently perched water from a crib.	Sand Stough		Type of filler: Not documented Depth to bottom, 39. 24Jul91 TV	4-ft	
	40-ft ?	·	Depth bottom of peri Depth bottom of casi Depth bottom of bore	ing:	[_ND] [_60-ft] [_60-ft]
Drawing By: RKL/1#K#18.ASB Date: Reference: HANFORD WELLS	_				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-18

199-K-18 WELL DESIGNATION CERCLA UNIT 100-KR-4 RCRA FACILITY NA

ND HANFORD COORDINATES : N W ND LAMBERT COORDINATES : ND E ND

DATE DRILLED 0ct54 DEPTH DRILLED (GS) : 60-ft

MEASURED DEPTH (GS) : 39.4-ft, 24Jul91 TV

52-ft, Oct54; 15.8-ft, 24Jul91 TV 6-in, from 1.7+60-ft DEPTH TO WATER (GS) :

CASING DIAMETER

409.00-ft ELEV TOP CASING

(~410.66 after repairs, 24Jul91)

407.3-ft ELEV GROUND SURFACE :

("407.7-ft after repairs, 24Jul91)
"18-not documented TV PERFORATED INTERVAL :

SCREENED INTERVAL

NA

COMMENTS

FIELD INSPECTION, 26Feb91

Carbon steel casing,

pump hanger holes and large notches in casing, no pad, no posts.

Capped, not locked. No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS Driller

28May91, depths referenced to ground surface; TV SCAN COMMENTS

Depth to bottom: 38.0-ft, silty.

Depth to water: 18.4-ft, some floating debris. Water clear, some dislodged scale

and suspended debris.

Vadose and submerged casing very cruddy from top to bottom.

Perforations could not be determined.

24Jul91,

Depth to bottom: 39.4-ft, Depth to water: 15.8-ft, floating debris. Vadose casing clean, submerged casing clean. Perforations 17.7-ft-not determined, clean.

COMMENTS: Repaired bent casing, removed 0.82-ft, added 2.48-ft of new casing.

DATE EVALUATED

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EVAL RECOMMENDATION :

LISTED USE Not sampled 1989 PUMP TYPE

No pump documented MAINTENANCE 25May91; TV run

30May91; Brushed casing. Cleaned debris with sand pump and bailer.

No contamination encountered.

17Jul91; Developed well by pumping to <5 NTU. 24Jul91; TV run.

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-19

199-K-19 WELL DESIGNATION 100-KR-1 CERCLA UNIT NA

RCRA FACILITY

HANFORD COORDINATES : 78,000 W 67,000 483,000 E 2,228,000 N LAMBERT COORDINATES : N

DATE DRILLED Apr55 51-ft

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 47.1-ft, 01Aug91

DEPTH TO WATER (GS) : 31.0-ft, Apr55; 28.9-ft, 01Aug91

8-in, from +2.0+51-ft 422.17-ft CASING DIAMETER ELEV TOP CASING

420.2-ft Estimated ELEV GROUND SURFACE : PERFORATED INTERVAL : 10+50-ft

SCREENED INTERVAL

26+46-ft, #15 slot, galvanized FIELD INSPECTION, 26Feb91, COMMENTS

Carbon steel, no pad, no posts, capped not locked. Hanger holes in casing.

No permanent identification. Not in radiation zone.

OTHER:

Driller AVAILABLE LOGS

07Jun91; depths referenced to ground surface; TV SCAN COMMENTS

Depth to bottom: 46.3-ft, silty and small pebbles.
Depth to water: 27.2-ft, some floating debris. Water clear, some dislodged scale

and suspended debris.

Screen: 26.6-ft*not determined, fairly clean. Blank above screen starts at ~ 21-ft.

Vadose casing very light corrosion/scale rust; submerged casing heavy. Perforations start at 12.5-ftmot determined, 4 cuts/rd/ft.

The well will need cleaning.

DATE EVALUATED NA EVAL RECOMMENDATION : NA

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LISTED USE

Sampled 1989 for NO₃, Cr; water levels measured 30Dec57+09Apr90

Electric submersible, intake set at 39.3-ft (top-of-casing). PUMP TYPE

MAINTENANCE 03Jun91; Pulled pump. No contamination encountered.

G7Jun91; TV run.
25Jun91; Brushed casing and cleaned debris with sand pump and bailer.
22Jul91; Developed well by pumping to <5 NTU.

01Aug91; Installed electric submersible pump.

WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Method: Cable tool	Sample Method: Hard tool (nom)	WELL TEMPORARY NUMBER: 199-K-20 WELL NO: 105-KE-5			
Drilling Fluid Used: Not documented	Additives Used: Not documented	Hanford Coordinates: N/S N 79,500 E/W W 66,125			
Driller's	WA State Lic Nr: Not documented	State Coordinates: N 484,600 E 2,229,000			
Name: <u>Chausse, Gentz</u> Drilling	Company	Start			
Company: <u>Not documented</u> Date	_ Location: <u>Not documented</u>	Card #: <u>Not documented</u> T R S Elevation			
Started: 27Apr55	Complete: 05May55	Ground surface (ft): 420,5 Estimated			
Depth to water: 30.0-ft Amount Surface) 29.9-ft Amount Surface) 30.0-ft Amount Surface) 29.9-ft Amount Surface	or55 ug91	Elevation of reference point: [422.57-fi (top of casing) Height of reference point above[2.1-ft ground surface			
		Depth of surface seal [ND			
0+10: GRAVEL-BOULDERS 10+23: BOULDERS 23+34: BOULDERS, GRAVEL 34+50: GRAVEL		Type of surface seal: None documented			
JAMOS GIANCE		<pre>[.D. of surface casing [_ND (If present)</pre>			
		Depth top of perforations: [<u>10-ft</u> Description of perforations: Not documented			
REMEDIATION: Jun74, by Bultena. Installed gravel plug		I.D. of riser pipe: [8.0-in] Type of riser pipe: Carbon_steel			
at 47.5-ft.		Diameter of borehole: <u>[9-în no</u>			
ı	Gravet	Type of filler: Not documented			
	+	Depth bottom of perforations: [_50-ft Depth bottom of casing: [_50-ft Depth bottom of borehole: [_50-ft			
Drawing By: RKL/1#K#20,ASB	Date:				
Reference: HANFORD WELLS		į.			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-20

199-K-20 WELL DESIGNATION CERCLA UNIT 100-KR-1 RCRA FACILITY NA

HANFORD COORDINATES : N 79,500 W 66,125 LAMBERT COORDINATES : N 484,600 E 2,229,000

DATE DRILLED Apr+May55 50-ft

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 47.0-ft, 01Aug91

30.0-ft, Apr55; 29.9-ft, 01Aug91 8-in, +2.0+51-ft 422.57-ft DEPTH TO WATER (GS) :

CASING DIAMETER

ELEV TOP CASING ELEV GROUND SURFACE: 420.5-ft Estimated

10+50-ft PERFORATED INTERVAL :

SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 26Feb91,

Carbon steel casing, no pad, no posts,

capped and locked. Casing has hanger holes.

No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS Driller

TV SCAN COMMENTS

07Jun91, depths referenced to ground surface; Depth to bottom: 44.6-ft, looked like sand on bottom.

Depth to water: 27.2-ft, some floating debris. Water clear, some dislodged scale

and suspended debris.

Vadose some corrosion/scale/rust near water; submerged casing fairly heavy

corrosion/scale/rust. Perforations start at 9.8-ft+not determined,

those visible were open. Well needs to be cleaned.

24Jul91;

Depth to bottom: 45.3-ft, sand and some gravel. Depth to water: 28.5-ft, surface clean. Water clear.

Vadose casing clean, casing looked bent at 12-ft, rough t0 14-ft;

submerged casing clean. Perforations start at 9.8-ft

to not determined. Perforations were clean.

DATE EVALUATED

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EVAL RECOMMENDATION : NA

LISTED USE

NA

Sampled 1989 for NO₃, Cr; water levels measured 30Dec57+09Apr90

Electric submersible, intake set at 39.8-ft (top-of-casing). PUMP TYPE

03Jun91; Pulled pump. No contamination encountered. MAINTENANCE

07Jun91; TV run. 26Jun91; Brushed casing and removed debris with sand pump and bailer. 23Jul91; Developed well by pumping to <5 NTU.

24Jul91; TV run.

01Aug91: Installed electric submersible pump.

	WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Method: Cable tool	Sample Method: Hard tool (nom)	WELL TEMPORARY NUMBER: 199-K-21 WELL NO: 105-KE-6 Hanford
Drilling Fluid Used: <u>Not documented</u> Driller's	Additives Used: Not documented WA State	Coordinates: N/S N 80,000 E/W W 66,000 State
Name: Richards, Jahnke, Gentz	Lic Nr: Not documented	State Coordinates: N
Drilling Company: Not documented	Company Location: Not documented	Card #:Not documented T R S
Date Started: <u>06May55</u>	Date Complete: <u>17May55</u>	Ground surface (ft): 420.1 Estimated
Depth to water: 28.5-ft Ma (Ground surface) 11.1-ft Oc GENERALIZED Driller's	y55 t67	<pre>Letevation of reference point: [421.73-ft</pre>
GENERALIZED Driller's STRATIGRAPHY Log		ground surface
0+12: SAND, ROCK and GRAVEL		Depth of surface seal [ND
12-15: SAND, GRAVEL 15-40: GRAVEL 40-50: Coarse GRAVEL, fine SA	NO.	Type of surface seal: None_documented
The same district, The same		I.D. of surface casing <u>[ND </u> (If present)
		Depth top of perforations: [_10-ft *] Description of perforations: Not documented
		Type of riser pipe: [8.0-in Type of riser pipe: Carbon steel
		——— Diameter of borehole: <u>[9-in nöm</u>
	Fill	Not documented
	16-ft?; -	Depth bottom of perforations: [50-ft] Depth bottom of casing: [50-ft] Depth bottom of borehole: [50-ft]
Drawing By: RKL/1#K#21.ASB	Date:	
Reference: HANFORD WELLS		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-21

199-K-21 WELL DESIGNATION CERCLA UNIT 100-KR-1 RCRA FACILITY НA

HANFORD COORDINATES : LAMBERT COORDINATES : N 80,000 N 485,000 W 66,000 E 2,229,000

May55 DATE DRILLED 50-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 28.5-ft, May55; 11.1-ft, 190ct67

8-in, from +1.6+50-ft 421.73-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 420.1-ft Estimated

PERFORATED INTERVAL : 10+50-ft

SCREENED INTERVAL

COMMENTS

FIELD INSPECTION, 26Feb91
Carbon steel, no pad, no posts. Capped, and locked.
No permanent identification. Not in radiation zone.

OTHER: Driller AVAILABLE LOGS TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : NA

LISTED USE Not sampled 1989;

water levels measured 30Dec57+19Oct67

PUMP TYPE но ритр MAINTENANCE ND

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	WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Name: Gentz Drilling Company: Not documented Date Started: 17May55	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documented Date Complete: 20May55	WELL TEMPORARY NUMBER: 199-K-22 WELL NO: 105-KE-7 Hanford Coordinates: N/S N 81,000 E/W W 65,000 State Coordinates: N 486,000 E 2,230,000 Start Card #:Not documented T R S Elevation Ground surface (ft): 418.9 Estimated
Depth to water: 6.0-ft Mr (Ground surface) 32.9-ft Ar GENERALIZED Driller's STRATIGRAPHY Log 0+15: BOULDERS, SAND and GRAV 15+20: BOULDERS and GRAVEL 20+25: Not documented 25+50: Coarse GRAVEL, fine Sa	/EL	Elevation of reference point: [421.68-ft] (top of casing) Height of reference point above[2.8-ft] ground surface Depth of surface seal
REMEDIATION: Jun74, by Bultena Set screen and cemented bottom.		Depth top of perforations: Description of perforations: Not documented TV scan notes perforations start at "20-ft. I.D. of riser pipe: Carbon steel Diameter of borehole: Screen 29*49-ft 1-ft blank 49*50-ft 6-in telescoping screen set with neoprene packer
Drawing By:_RKL/1#K#22,ASB	MINIMINIMINIMINIMINIMINIMINIMINIMINIMIN	Type of filler: Not documented Depth to bottom, 49.9-ft 01Aug91 Depth bottom of perforations: [_50-ft] Depth bottom of casing: [_50-ft] Depth bottom of borehole: [_50-ft]
Reference: HANFORD WELLS		

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-22

199-K-22 WELL DESIGNATION 100-KR-1 CERCLA UNIT RCRA FACILITY NA

N 81,000 W 65,000 HANFORD COORDINATES : N 486,000 E 2,230,000 LAMBERT COORDINATES :

DATE DRILLED May55 50-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) :

49.9-ft, 01Aug91 6.0-ft, May55; 32.9-ft, 01Aug91 8-in, +2.0+51-ft DEPTH TO WATER (GS) :

CASING DIAMETER 421.68-ft ELEV TOP CASING

ELEV GROUND SURFACE : 418.9-ft Estimated

PERFORATED INTERVAL : 10+50-ft 29+49-ft

SCREENED INTERVAL

FIELD INSPECTION, 26Feb91, COMMENTS Carbon steel, pump hanger hole, no pad, no posts, capped and locked.

No permanent identification. Not in radiation zone.

OTHER:

Driller AVAILABLE LOGS

07Jun91, depths referenced to ground surface; TV SCAN COMMENTS

Depth to bottom: Unable to determine. Depth to water: 29.9-ft, some floating debris. Water clear, some distodged scale

and suspended debris.

Vadose casing, some light scale. Submerged casing, unable to determine, perforations start at 19.7-ft, 4 cuts/rd/ft. Screen started at top of water at 29.9-ft-not determined. Continous wrap screen with some corrosion.

It needs to be cleaned. There is a rope in the well that has to be fished out.

29Jul91;

Depth to bottom: 49.2-ft, cement, cement is cracked and broken.

Depth to water: 33.1-ft, surface clean. Water clear, with some suspended debris.

Vadose casing clean; submerged casing clean. Perforations start at 17.4-ft

to ~25.6-ft, 1 cuts/rd/ft.

Continous wrap screen 30.2-49.2-ft, screen is clean and looks in good shape.

DATE EVALUATED EVAL RECOMMENDATION :

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Sampled 1989 for $^3\mathrm{H}$, U, $^{90}\mathrm{Sr}$, NO $_{3}$, Cr; water levels measured 30Dec57+02Mar90 LISTED USE

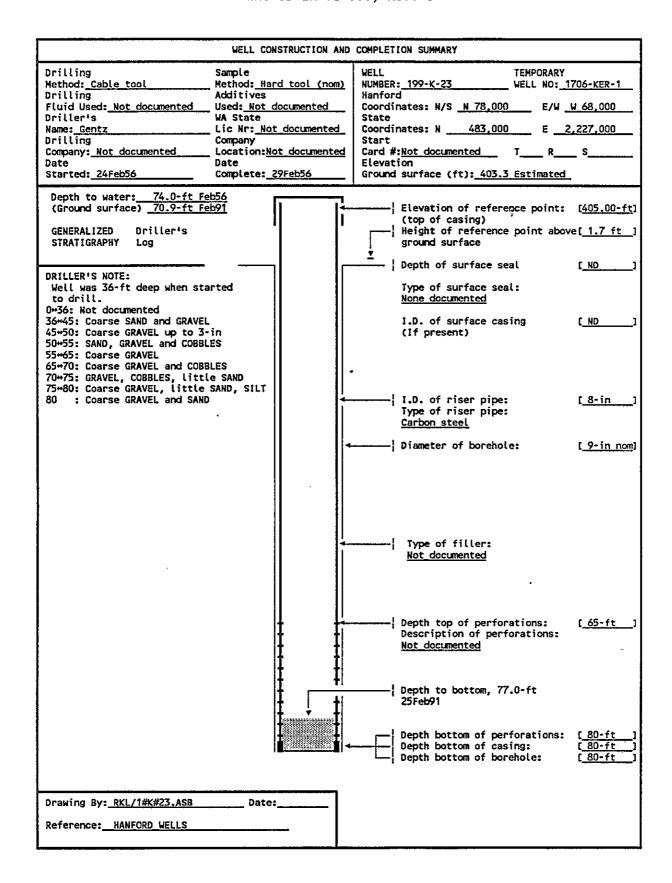
Hydrostar, intake set at 49.0-ft (top-of-casing). PUMP TYPE 03Jun91; Pulled pump, no contamination encountered. MAINTENANCE

07Jun91; TV run.

27Jun91; Removed rope and sample bailer from well. Brushed casing and cleaned debris with sand pump and bailer. No contamination encountered.

29Jul91: Developed well to <5 NTU.

29Jul91; TV run. 01Aug91; Installed hydrostar pump



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-23

199-K-23 WELL DESIGNATION CERCLA UNIT 100-KR-1 RCRA FACILITY NA

N 78,000 W 68,000 N 483,000 E 2,227,000 HANFORD COORDINATES : LAMBERT COORDINATES :

Feb56 DATE DRILLED 80-ft

DEPTH DRILLED (GS) :

77-ft, 25Feb91 74-ft, Feb56; 70.9-ft, 25Feb91 8-in, +1.7~80-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

CASING DIAMETER

ELEV TOP CASING : ELEV GROUND SURFACE : 405.00-ft

403.3-ft Estimated

PERFORATED INTERVAL : 65+80-ft

SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 25Feb91

Carbon steel, pump hanger holes, no pad, no posts. Capped, not locked. No permanent identification. Not in radiation zone.

OTHER: Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : НA LISTED USE None PUMP TYPE No pump

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-24

199-K-24 WELL DESIGNATION CERCLA UNIT 100-KR-1

RCRA FACILITY

N 77,000 W 69,000 N 482,000 E 2,226,000 Dec52 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 50-ft NĐ DEPTH TO WATER (GS) :

8-in, from ND+50-ft 467.00-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : ND

PERFORATED INTERVAL : None documented

SCREENED INTERVAL NA

COMMENTS No FIELD INSPECTION, - unable to locate OTHER:

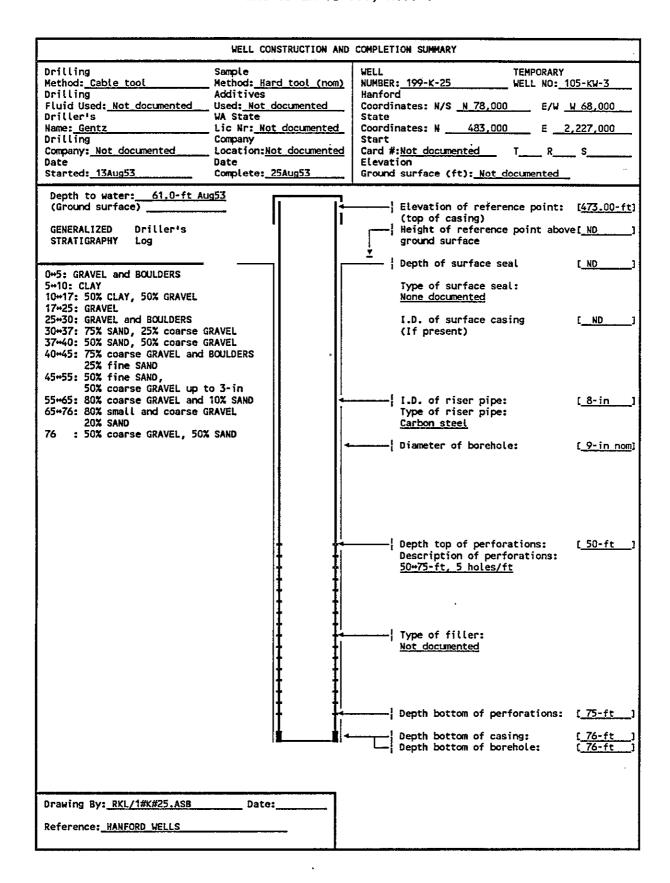
AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA LISTED USE None :

PUMP TYPE No pump documented

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-25

WELL DESIGNATION : 199-K-25 CERCLA UNIT : 100-KR-1 RCRA FACILITY : NA

HANFORD COORDINATES: N 78,000 W 68,000 LAMBERT COORDINATES: N 483,000 E 2,227,000

DATE DRILLED : Aug53
DEPTH DRILLED (GS): 76-ft
MEASURED DEPTH (GS): ND
DEPTH TO WATER (GS): 61.0-f

DEPTH TO WATER (GS): 61.0-ft, Aug53
CASING DIAMETER: 8-in, ND+76-ft
ELEV TOP CASING: 467.00-ft
ELEV GROUND SURFACE: ND
PERFORATED INTERVAL: 50+75-ft

SCREENED INTERVAL : NA

COMMENTS : No FIELD INSPECTION, - unable to locate

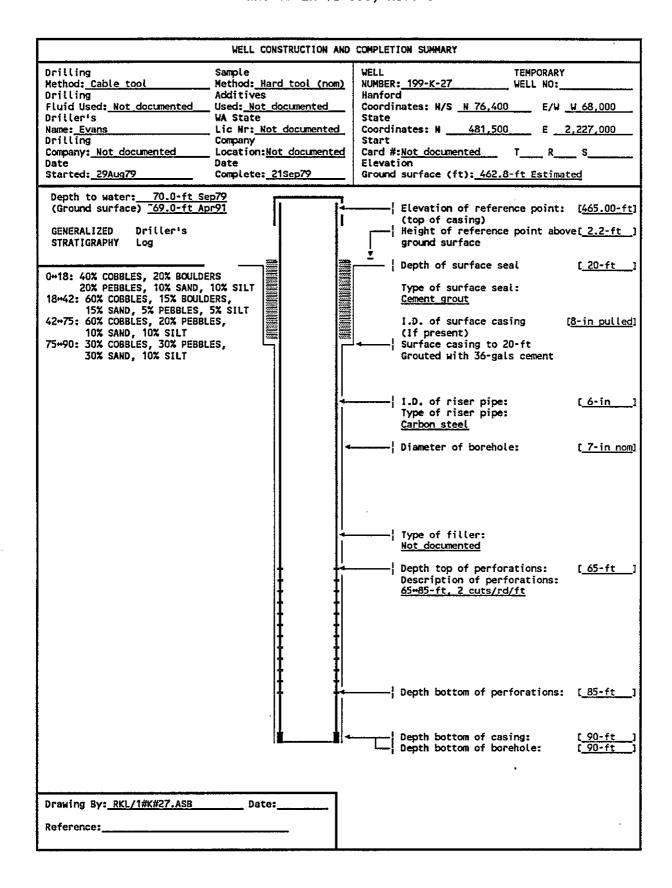
OTHER: Driller

AVAILABLE LOGS : Drill
TV SCAN COMMENTS : NA
DATE EVALUATED : NA
EVAL RECOMMENDATION : NA
LISTED USE : None

PUMP TYPE : No pump documented

MAINTENANCE : ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-27

199-K-27 WELL DESIGNATION CERCLA UNIT 100-KR-2 RCRA FACILITY NA

N 76,400 W 68,000 N 481,500 E 2,227,000 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Aug+Sep79 90-ft DEPTH DRILLED (G\$) : ND

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 70.0-ft, Sep79; ~69.0-ft 17Apr91 6-in, +2.2+90-ft 465.00-ft

CASING DIAMETER ELEV TOP CASING

462.8-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : 65+85-ft

SCREENED INTERVAL

FIELD INSPECTION, 26Feb91, COMMENTS

Carbon steel, pump hanger hole, no pad, no posts, capped and locked. No permanent identification.

Not in radiation zone.

OTHER:

Driller AVAILABLE LOGS 08Sep91, TV SCAN COMMENTS

Depth to bottom: 83.0-ft, sandy.

Depth to water: 68.6-ft, some floating debris.

Water clear with dislodged scale and suspended debris. Vadose casing some corrosion/scale/rust just above water; submerged casing has fairly heavy corrosion/scale/rust.

Perforations start at 61.4-ft to not determined, 2 cuts/rd/ft. Open above water, not observed below water. The well needs cleaning.

DATE EVALUATED EVAL RECOMMENDATION :

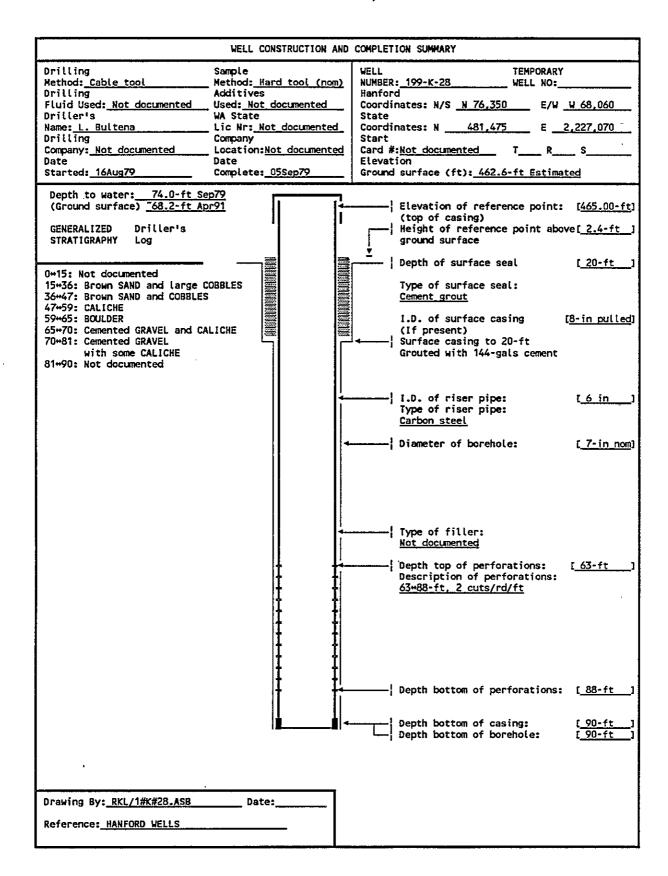
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LISTED USE

NA Sampled 1989 for ³H, U, ⁹⁰Sr, NO₃, Cr; water levels measured 25Mar57*17Apr91

PUMP TYPE

Electric submersible, intake set at xxxx ft 07Aug91; Pulled electric submersible pump. No contamination encountered. 09Aug91; TV run. MAINTENANCE



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-28

199-K-28 WELL DESIGNATION 100-KR-2 CERCLA UNIT RCRA FACILITY NA

N 76,350 W 68,060 HANFORD COORDINATES : LAMBERT COORDINATES : N 481,475 E 2,227,070

Aug+Sep79 DATE DRILLED 90-ft DEPTH DRILLED (GS) : MEASURED DEPTH (GS) :

74.0-ft, Sep79; ~68.2-ft 19Apr91 6-in, +2.4+90-ft DEPTH TO WATER (GS) :

CASING DIAMETER 465.00-ft ELEV TOP CASING 462.6-ft estimated ELEV GROUND SURFACE :

63+88-ft PERFORATED INTERVAL :

SCREENED INTERVAL

COMMENTS FIELD INSPECTION, 26Feb91, Carbon steel, pump hanger hole, no pad, no posts, capped and locked.

No permanent identification. Not in radiation zone.

OTHER: Driller

AVAILABLE LOGS TV SCAN COMMENTS 09Aug91,

depths referenced to ground surface Depth to bottom: 87.9-ft, sandy.

Depth to water: 67.6-ft, some floating debris.

Water clear with dislodged scale and suspended debris.

Vadose casing some corrosion/scale/rust, pitting from 42-ft to water; submerged casing heavy corrosion/scale/rust near the bottom.

Perforations start at 64.0-ft to not determined, 2 cuts/rd/ft. They were open above water, very few seen below water. The well needs cleaning.

DATE EVALUATED NA EVAL RECOMMENDATION :

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: Sampled 1989 for ³H, U, ⁹⁰Sr, NO₃, Cr; water levels measured 25Mar57*17Apr91 LISTED USE

Electric submersible, intake set at xxxx ft PUMP TYPE

MAINTENANCE 07Aug91; Removed electric submersible pump. No contamination encountered.

09Aug91; TV run.

20Sep91; Brushed casing and bailed debris. No contamination encountered. 02Oct91; Developed well to <5 NTU.

WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Name: L. Bultena Drilling Company: Not documented Date Started: 06Sep79	Sample Method: Hard tool (nom Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documente Date Complete: 24Sep79	Hanfo Coord State Coord Start d Card Eleva	inates: N/S <u>N 76,500</u> E/W inates: N <u>481,625</u> E #: <u>Not_documented</u> T R	<u>w 68,775</u> 2,227,350 s	
Depth to water: 74.0-ft S (Ground surface) 68.6-ft A GENERALIZED Driller's STRATIGRAPHY Log 0+18: Not documented 18+35: Brown SAND, COBBLES and BOULDERS 35+40: Brown SAND and COBBLE 40+50: Tight SAND and GRAVEL and COBBLES 50+85: Compacted SAND and CO 85+90: Not documented	p <u>r91</u>		Elevation of reference point (top of casing) Height of reference point ab ground surface Depth of surface seal: Type of surface seal: Cement grout I.D. of surface casing (If present) Surface casing to 20-ft Grouted with 63-gals cement I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole: Type of filler: Not documented Depth top of perforations: Description of perforations: Not documented Depth bottom of casing: Depth bottom of borehole:	[20-ft] [20-ft] [8-in pulled] [6-in] [7-in nom]	
Drawing By: <u>RKL/1#K#29.ASB</u> Reference: <u>HANFORD WELLS</u>	Date:				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-29

199-K-29 WELL DESIGNATION 100-KR-2 CERCLA UNIT RCRA FACILITY NA

HANFORD COORDINATES : LAMBERT COORDINATES : N 76.550 W 68,775 N 481,625 E 2,227,350

Sep79 DATE DRILLED DEPTH DRILLED (GS) : 90-ft MEASURED DEPTH (GS) : ND

74.0-ft, Sep79; ~68.6-ft Apr91 6-in, +3.2+90-ft 465.00-ft DEPTH TO WATER (GS) :

CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 461.8-ft Estimated 65+85-ft PERFORATED INTERVAL :

SCREENED INTERVAL MA

FIELD INSPECTION, 26Feb91, COMMENTS

Carbon steel, pump hanger hole, no pad, no posts, capped and locked. No permanent identification.

Not in radiation zone.

OTHER:

AVAILABLE LOGS Driller TV SCAN COMMENTS 09Aug91,

Depth to bottom: 88.2-ft, sandy. Depth to water: 67.9-ft, some floating debris.

Water clear. with dislodged scale and suspended debris, more near the bottom.

Vadose casing light corrosion/scale/rust;

submerged casing some corrosion/scale/rust, heavier nearer the bottom.

Perforations start at 67.6-ft to not determined.

The well needs cleaning.

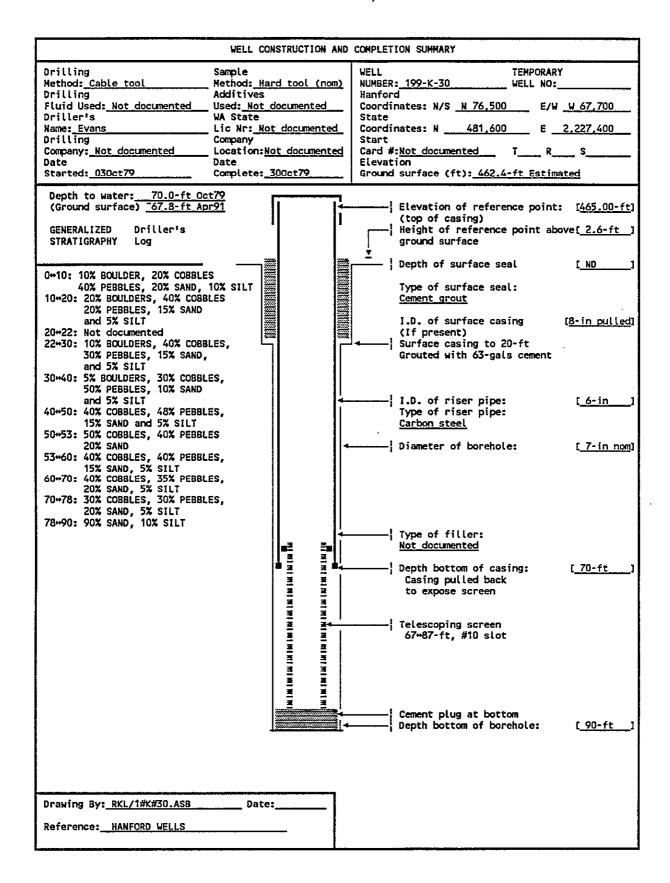
DATE EVALUATED EVAL RECOMMENDATION : NA

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Sampled 1989 for $^3\mathrm{H}$, U, $^{90}\mathrm{Sr}$, NO $_3$, Cr; water levels measured 25Mar87+18Apr91 LISTED USE

Electric submersible, intake set at xxxx ft PUMP TYPE

07Aug91; Removed electric submersible pump. No contamination encountered. 09Aug91; TV run. 23Sep91; Brushed casing and bailed debris. No contamination encountered. 03Oct91; Developed well to <5 NTU. MAINTENANCE



4.

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-30

199-K-30 WELL DESIGNATION CERCLA UNIT 100-KR-2

RCRA FACILITY НA

HANFORD COORDINATES : N 76,500 W 67,700 LAMBERT COORDINATES : N 481,600 E 2,227,400

0ct79 DATE DRILLED DEPTH DRILLED (GS) : 90-ft MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

70.0-ft, Oct79: "67.8-ft 17Apr91 6-in, +2.6*70-ft, pulled back from 90-ft 465.00-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 462.4-ft Estimated

70+90-ft PERFORATED INTERVAL :

67+87-ft, #10 slot SCREENED INTERVAL

COMMENTS FIELD INSPECTION, 26Feb91,

Carbon steel, pump hanger hole, no pad, no posts, capped and locked.

No permanent identification.

Not in radiation zone.

OTHER: Driller

AVAILABLE LOGS 09Aug91; TV SCAN COMMENTS

Depth to bottom: 86.6-ft, sandy.

Depth to water: 67.3-ft, some floating debris.

Water clear with some dislodged scale and suspended debris.

Vadose casing some corrosion/scale/rust;

submerged casing clean. No perforations seen.

Continous wrap screen started at 66.9-ft to not determined. Screen appeared to have algae growth. The well needs cleaning.

to 160.4-ft, 2 cuts/rd/ft.

NA DATE EVALUATED

EVAL RECOMMENDATION : NA

NA
Sampled 1989 for ³H, U, ⁹⁰Sr, NO₇, Cr;
water levels measured 19Mar87*17Apr91
Electric submersible, intake set at xxxx ft LISTED USE

PUMP TYPE

MAINTENANCE

07Aug91; Removed electric submersible pump. No contamination encountered. 09Aug91; TV run. 24Sep91; Brushed well and bailed debris. No contamination encountered.

WELL CONSTRUCTION AND COMPLETION SUMMARY						
Drilling Method: <u>Cable tool</u>	Sample Method: Hard tool (nom)		m)		TEMPORARY	
Drilling Fluid Used: Not documented	Additives			Hanford		W ND
Driller's	Used: Not documented WA State		-	State	naces: N/3 NO C/W	W ND
Name: Not documented	_ Lic Nr: Not	documente	<u>d</u>		nates: N E	
Drilling Company: Not documented	Company Location: <u>No</u>	t document	ed	Start Card #	:Not_documentedTR_	s
Date	Date		_	Elevat	ion	
Started: Not documented	Completes	Мауаь	<u> </u>	Ground	surface (ft): Not documented	
Depth to water: 25.9-ft (TO) (Top of casing)	<u> </u>		ī-		Elevation of reference point: (top of casing)	[<u>ND</u>]
GENERALIZED Driller's STRATIGRAPHY Log	1			Ţ-I	Height of reference point abo ground surface	ve[<u>ND</u>]
	 1		 	-	Depth of surface seal	[<u>ND</u>]
0+50: Not documented					Type of surface seal: None documented	
	<u> </u>				I.D. of surface casing (If present)	[<u> </u>
				<u> </u>	I.D. of riser pipe: Type of riser pipe:	[<u>6.0-in</u>]
					<u>Carbon steel</u>	
	-				Diameter of borehole:	[<u>DM</u>]
	:	# # # #	-		Type of filler: Not documented	
		#1 #1 #1 #1 #1 #1 #1 #1 #1 #1 #1 #1 #1 #	İ	¦	Depth top of perforations: Description of perforations: None documented	E_ND]
		3 3	<u> </u>		Screen 30+50-ft Description not documented	
			-		Depth bottom of perforations:	[<u> </u>
			∐ ←		Depth bottom of casing: Depth bottom of borehole:	[ND
Drawing By: RKL/1#K#31.ASB	Date:					
Reference: HANFORD WELLS		_				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-K-31

199-K-31 WELL DESIGNATION CERCLA UNIT 100-KR-4

RCRA FACILITY NA

HANFORD COORDINATES : N ND W ND LAMBERT COORDINATES : N ND ND

DATE DRILLED Dec52 DEPTH DRILLED (GS) : 50-ft MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) : "25.9-ft (TOC) 6-in, from ND+ND CASING DIAMETER

ELEV TOP CASING ELEV GROUND SURFACE : ND PERFORATED INTERVAL : ND

SCREENED INTERVAL 30+50-ft

COMMENTS No FIELD INSPECTION, - location not documented

OTHER: AVAILABLE LOGS Driller NA

TV SCAN COMMENTS NA DATE EVALUATED EVAL RECOMMENDATION : NA

LISTED USE Not sampled 1989;

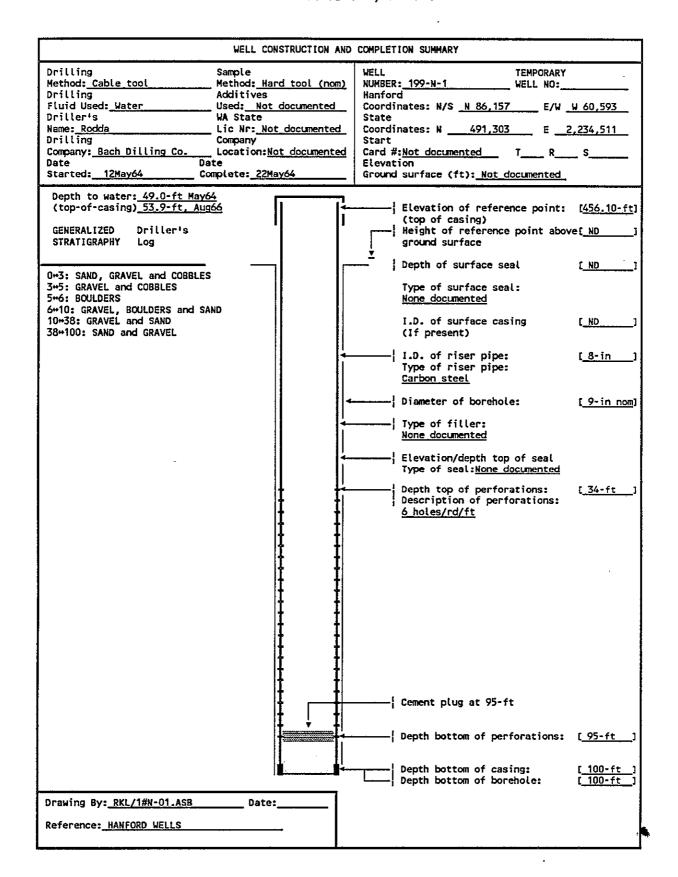
water levels measured 03Mar87&23Mar87 (Depth to water only)

PUMP TYPE No pump documented

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-1

199-N-1 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 86,157 W 60,593 N 491,303 E 2,234,511 May64 HANFORD COORDINATES : LAMBERT COORDINATES : DATE DRILLED

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 100-ft ND

49.0-ft, May64; 53.9-ft, Aug66 (top-of-casing) 8-in carbon steel, +ND+100-ft CASING DIAMETER

ELEV TOP CASING 456.10-ft ELEV GROUND SURFACE : ND 34+95-ft PERFORATED INTERVAL :

SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, none

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

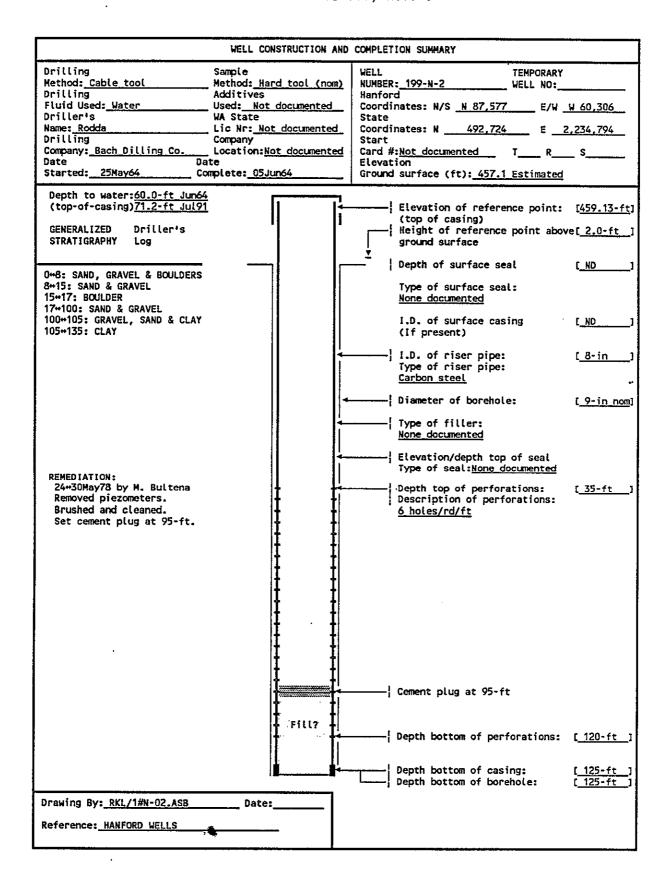
LISTED USE Water levels measured 23Oct62+15Aug66

PUMP TYPE MAINTENANCE None documented

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-2

WELL DESIGNATION 199-N-2

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 1301-N

N 87,577 W 60,306 N 492,724 E 2,234,794 HANFORD COORDINATES : LAMBERT COORDINATES :

May64 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 125-ft ND

DEPTH TO WATER (GS) :

60.0-ft, May64; 71.2-ft, Jul91 (top-of-casing) 8-in carbon steel, +2.0+125-ft CASING DIAMETER

459.13-ft ELEV TOP CASING 457.1-ft, Estimated ELEV GROUND SURFACE :

35+120-ft PERFORATED INTERVAL : SCREENED INTERVAL NA

FIELD INSPECTION, 26Apr91, COMMENTS

Carbon steel casing.

No pad, No posts, capped, locked. No permanent identification.

Located in radiation zone. Driller

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

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RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 230ct64+31Jul91;

Electric submersible PUMP TYPE

MAINTENANCE ND

WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Sample Method: Cable tool Method: Hard tool (not) Drilling Additives Fluid Used: Water Used: Not documented Driller's WA State Name: Shafer Lic Nr: Not documented Drilling Company Company: Bach Dilling Co. Date Started: 02Jun64 Complete: 12Jun64 Depth to water: 63.0-ft Jun64	Hanford Coordinates: N/S N 86,365 E/W W 60,828 State Coordinates: N 491,511 E 2,234,277 Start Card #:Not documented T R S Elevation Ground surface (ft): 457.8 Estimated			
Depth to water: 63.0-ft Jun64 (Ground surface)69.3-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log O+11: BOULDERS and DUST 11+15: BOULDERS and SAND 15+17: BOULDER, SAND and DUST 17+20: COBBLES and SAND 20+21: BOULDERS and SAND 21+22: BOULDERS and GRAVEL 22+63: SAND and GRAVEL 63+68: SAND 68+74: SAND and GRAVEL 74+76: SAND 76+98: SAND and GRAVEL 98+104: SAND 104+106: SAND and GRAVEL 106+125: Not documented REMEDIATION: Removal of piezometers and probable setting of plug not documented.	Elevation of reference point: [459.45-ft] (top of casing) Height of reference point above[_1.7-ft_] ground surface Depth of surface seal: ND			
Drawing By: RKL/1#N-03.ASB Date:	Depth bottom of casing: [<u>-125-ft</u>] Depth bottom of borehole: [<u>125-ft</u>]			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-3

199-N-3 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY

1301-N N 86,365 W 60,826 N 491,511 E 2,234,277 HANFORD COORDINATES : LAMBERT COORDINATES :

Jun64 DATE DRILLED 125-ft DEPTH DRILLED (GS) : ND

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 63.0-ft, Jun64; 69.3-ft, Jul91

8-in carbon steel, +1.7+125-ft CASING DIAMETER

459.45-ft ELEV TOP CASING ELEV GROUND SURFACE : 457.8-ft, Estimated

35+95-ft PERFORATED INTERVAL : NA SCREENED INTERVAL

COMMENTS FIELD INSPECTION, 26Apr91,

Carbon steel casing.

No pad, No posts, capped, and locked. No permanent identification.

Located in radiation zone. Has Stevens Recorder installed.

AVAILABLE LOGS Driller' TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

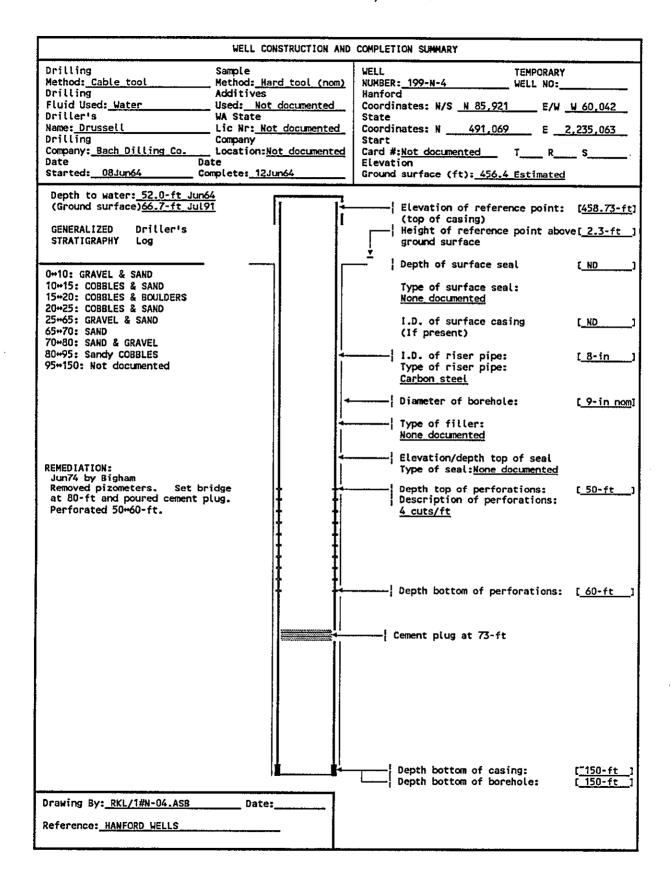
RCRA monthly water level measurements, quarterly sampling; Water levels measured 230ct64+31Jul91 LISTED USE

Electric submersible PUMP TYPE

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-4

199-N-4 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

1301-N RCRA FACILITY

N 85,921 W 60,042 N 491,069 E 2,235,063 HANFORD COORDINATES : LAMBERT COORDINATES :

Jun64 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 150-ft ND

DEPTH TO WATER (GS) : 52.0-ft, Jun64;

66.7-ft, Jul91 8-in carbon steel, +2.3+150-ft CASING DIAMETER

458.73-ft ELEV TOP CASING

456.4-ft, Estimated ELEV GROUND SURFACE : 50+60-ft

PERFORATED INTERVAL : NA SCREENED INTERVAL

FIELD INSPECTION, 26Apr91, COMMENTS

Carbon steel casing.

No pad, No posts, capped, and locked. No permanent identification.

Located in radiation zone.

Driller

AVAILABLE LOGS TV SCAN COMMENTS DATE EVALUATED NA EVAL RECOMMENDATION :

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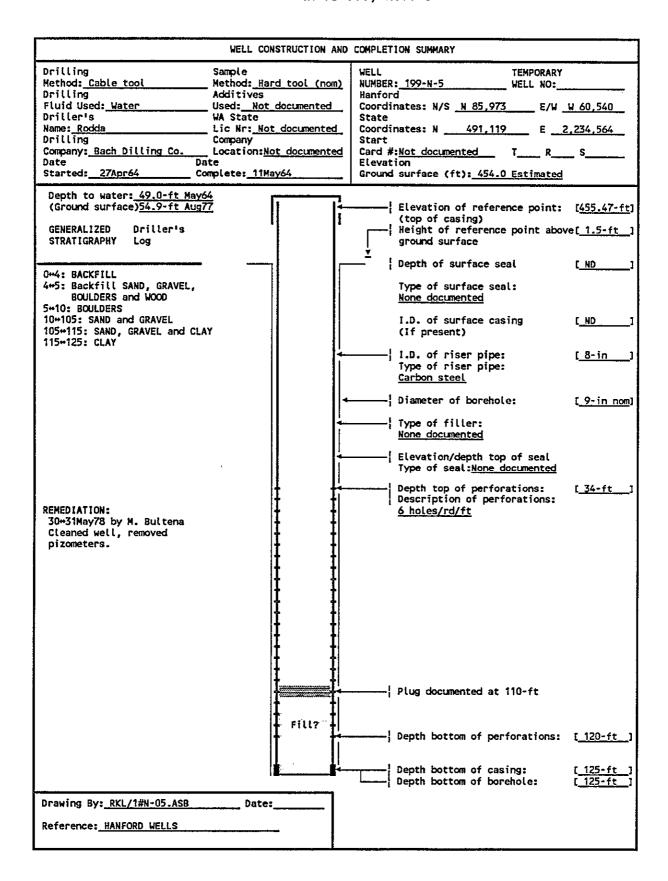
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RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 230ct64+31Jul91

Electric submersible PUMP TYPE

MAINTENANCE



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-5

199-N-5 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 85,973 W 60,540 N 491,119 E 2,234,564 HANFORD COORDINATES : LAMBERT COORDINATES :

May64 DATE DRILLED DEPTH DRILLED (GS): MEASURED DEPTH (GS): 125-ft

DEPTH TO WATER (GS) :

49.0-ft, May64; 54.9-ft, Aug77 8-in carbon steel, +1.5+125-ft 455.47-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 454-ft, Estimated PERFORATED INTERVAL : 34+120-ft

NA SCREENED INTERVAL

COMMENTS FIELD INSPECTION, 26Feb90,

Carbon steel casing.

No pad, no posts, capped, not locked. No permanent identification.

Controlled access zone.

Driller AVAILABLE LOGS TV SCAN COMMENTS

NA DATE EVALUATED EVAL RECOMMENDATION : NA

LISTED USE Water levels measured 230ct64+13Aug73

None PUMP TYPE ND MAINTENANCE

WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Sample Method: Cable tool Method: Hard tool (nor Additives Drilling Additives Used: Not documented Unitler's WA State Name: L. Bach Lic Nr: Not documented Drilling Company Company: Bach Dilling Co. Location: Not documented Started: 27Apr65 Date Started: 27Apr65 Complete: 05May65 Depth to water: 60.0-ft May65 (Ground surface)69.3-ft Jul91 GENERALIZED Driller's	Hanford Coordinates: N/S N 85,925 E/W W 59,572 State Coordinates: N 491,074 E 2,235,533 Start				
STRATIGRAPHY Log 0+14: BOULDERS, medium COBBLES 14+16: GRAVELS, COBBLES 16+17: BOULDER 17+18: Large BOULDER, GRAVEL 18+19: GRAVEL, some MUD 19+20: GRAVELS, COBBLES 20+21: GRAVEL, traces of CLAY-SAND 21+23: CLAY-SAND, GRAVEL, COBBLES 23+28: GRAVEL, traces SAND, Less CLAY	ground surface Depth of surface seal				
28+38: GRAVEL with CLAY-SAND 38+45: GRAVEL with SAND, trace CLAY 45+51: GRAVEL with fine SAND 51+62: CLAY with GRAVEL 62+71: Pea GRAVEL with slight CLAY 71 : Small GRAVEL with coarse SAND	Carbon steel Diameter of borehole: [9-in nom] Type of filler: None documented Elevation/depth top of seal Type of seal:Nane documented Depth top of perforations: [35-ft] Description of perforations: Not documented				
	Depth bottom of perforations: [_65-ft] Depth bottom of casing: (_71-ft]				
Drawing By: RKL/1#N-06,ASB Date:	Depth bottom of borehole: [71-ft]				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-6

WELL DESIGNATION 199-N-6

100-Aggregate Area CERCLA UNIT

RCRA FACILITY

N 85,925 W 59,572 N 491,074 E 2,235,533 HANFORD COORDINATES : LAMBERT COORDINATES :

May65 DATE DRILLED DEPTH DRILLED (GS): MEASURED DEPTH (GS): 71-ft ND

60.0-ft, May65; 69.3-ft Jul91 DEPTH TO WATER (GS) :

CASING DIAMETER 8-in carbon steel, +2.5+71-ft

460.97-ft ELEV TOP CASING

458.5-ft, Estimated ELEV GROUND SURFACE : PERFORATED INTERVAL : 35+65-ft

SCREENED INTERVAL NA

FIELD INSPECTION, 26Feb90, COMMENTS

Carbon steel casing.

No pad, No posts, capped, not locked. No permanent identification. Controlled access zone.

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

RCRA monthly water level measurements; LISTED USE

Water levels measured 07Jul65+31Jul91

Electric submersible PUMP TYPE ND

MAINTENANCE .

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: Bach Lic Nr: Not documented Drilling Company: Bach Dilling Co. Date Date Started: 06May65 Complete: 19May65		WELL TEMPORARY NUMBER: 199-N-7 WELL NO: Hanford Coordinates: N/S N 85,973 E/W W 60,540 State Coordinates: N 491,119 E 2,234,564 Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented		
Depth to water:54.0-ft May65 (top-of-casing) <u>62.2-ft Jan87</u> GENERALIZED Driller's STRATIGRAPHY Log	J F	Elevation of reference point (top of casing before removal Height of reference point abground surface	()	
0→17: BOULDERS, COBBLES, SAND 17→20: GRAVEL, SAND 20→26: Very small GRAVEL mixed with fine SAND		Type of surface seal: Formation cave, 0+25-ft		
26+28: Slight trace of small GRAVEL - QUICKSAND 28+30: GRAVEL, coarse SAND 30+40: GRAVELS, fine SAND		I.D. of surface casing (If present) I.D. of riser pipe:	[ND] [None]	
40+50: GRAVEL, SAND 50+60: Small GRAVELS, SAND 60-68: GRAVELS, coarse SAND mixed with CLAY		Type of riser pipe: <u>Carbon steel before removal</u> Diameter of borehole:	[<u>9-in nom</u>]	
WELL ABANONMENT: 24Apr87; Added 97-gals cement with 5% bentonite from 42*68-ft and 63-gals of dry granular bentonite 25*52-ft while pulling casing. Pulled final 25-ft of casing and allowed formation to cave into hole.		Type of filler: Granular bentonite 25*42-ft Elevation/depth top of seal Type of seal:Cement grout with 5% bentonite 42*68-ft Depth top of perforations: Description of perforations: Perforations before removal Depth bottom of casing: Depth bottom of borehole:	[<u>37-ft</u>]	
Drawing By: RKL/1#N-07.ASB Date Reference: HANFORD WELLS	:			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL -. 199-N-7

199-N-7 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

NA 85,973 W 60,540 N 491,119 E 2,234,564 May65 68-ft HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

54.0-ft, May65; 62.2-ft Jan87 (top-of-casing)

CASING DIAMETER

None, pulled 455.47-ft before removal ELEV TOP CASING ELEV GROUND SURFACE : ND PERFORATED INTERVAL : 37+67-ft before removal

SCREENED INTERVAL

FIELD INSPECTION, none COMMENTS

AVAILABLE LOGS Driller TV SCAN COMMENTS НA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 07Jul65+19Jan87 LISTED USE

PUMP TYPE MAINTENANCE None ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-8P

199-N-8P WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 86,790 W 60,790 HANFORD COORDINATES : LAMBERT COORDINATES : N 491,936 E 2,234,312

DATE DRILLED May66 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 100-ft ND

DEPTH TO WATER (GS) :

16.0-ft, May66; 13.1-ft May91 (top-of-casing) CASING DIAMETER 1.5-in carbon or galvanized steel, +ND+90-ft

ELEV TOP CASING 405.12-ft ELEV GROUND SURFACE : ND NA

PERFORATED INTERVAL : SCREENED INTERVAL 90+100-ft

FIELD INSPECTION, none COMMENTS

AVAILABLE LOGS TV SCAN COMMENTS Driller NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 21Jul87+09May91 LISTED USE

None documented PUMP TYPE

MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-8Q

199-N-89 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

ŇA RCRA FACILITY

H 86,804 W 60,782 N 491,950 E 2,234,320 May66 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 60-ft ND

DEPTH TO WATER (GS) :

16.0-ft, May66; 18.9-ft May88 (top-of-casing) 1.5-in carbon or galvanized steel, +ND+50-ft CASING DIAMETER

404.62-ft ELEV TOP CASING ELEV GROUND SURFACE : ND

NA PERFORATED INTERVAL :

50-60-ft, material/slot not documented FIELD INSPECTION, none SCREENED INTERVAL

COMMENTS

AVAILABLE LOGS Driller TV SCAN COMMENTS KA NA DATE EVALUATED EVAL RECOMMENDATION : NA

LISTED USE Water levels measured 21Jun87+23May88

PUMP TYPE MAINTENANCE None documented

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: Hatch Lic Nr: Not documented Drilling Company: Company: Hatch Drilling Co Date Date Started: 09Jun66 Complete: 11Jun66		WELL TEMPORARY NUMBER: 199-N-8R WELL NO: Hanford Coordinates: N/S N 86,810 E/W W 60,776 State Coordinates: N 491,956 E 2,234,326 Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented		
Depth to water: 16,0-ft Jun66 (top-of-casing) 18.4-ft May88 GENERALIZED Driller'S STRATIGRAPHY Log 0+14: COBBLES 14+37: Not documented 37+47: Coarse SAND 47+50: Fine SAND with CLAY		Elevation of reference point: [404.09-ft (top of casing) Height of reference point above[ND ground surface Depth of surface seal [ND I.D. of surface seal: None documented I.D. of surface casing (IND (If present) I.D. of riser pipe: [1.5-in Type of riser pipe:		
- -		Carbon steel or galvanized (nom) Diameter of borehole: [7-in nom Type of filler: Sand pack (now) Elevation/depth top of seal Type of seal:None documented Description of perforations: None documented		
NOTE: Documentation is very poor. Drillers logs mention use of screen, gravel and sand pack and pulling casing. Depths of gravel/sand pack not documented. Casing size not documented.	CoO CoO CoO	Screen 37*47-ft (nom) Gravel pack (nom) Depth bottom of borehole: [50-ft		
Drawing By: <u>RKL/1#N-08R.ASB</u> Da Reference: <u>HANFORD WELLS</u>	te:			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-8R

WELL DESIGNATION 199-N-8R :

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

N 86,810 W 60,776 N 491,956 E 2,234,326 HANFORD COORDINATES : LAMBERT COORDINATES :

Jun66 DATE DRILLED DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): 50-ft ND

16.0-ft, Jun66; 18.4-ft May88 (top-of-casing)

1.5-in carbon or galvanized steel, +ND+37-ft CASING DIAMETER

404.09-ft ELEV TOP CASING

ELEV GROUND SURFACE : ND PERFORATED INTERVAL :

37+47-ft, material/slot not documented FIELD INSPECTION, none SCREENED INTERVAL

COMMENTS

AVAILABLE LOGS Driller TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION :

Water levels measured 21Jul87+23May88 LISTED USE

None documented PUMP TYPE

MAINTENANCE

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Lic Nr: Not documented Drilling Company Company: Hatch Drilling Co Date Date Started: 09Jun66 Complete: 11Jun66		WELL TEMPORARY NUMBER: 199-N-8S WELL NO: Hanford Coordinates: N/S N 86,798 E/W W 60,789 State Coordinates: N 491,944 E 2,234,339 Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented			
Depth to water: 16.0-ft Jun66 (top-of-casing) 17.1-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+24: COBBLES and GRAVELS 24+34: COBBLES, GRAVEL and SAND 34+40: Heaving coarse SAND		<u></u>	Elevation of reference point: (top of casing) Height of reference point abov ground surface Depth of surface seal Type of surface seal: None documented		
SA-AO. HEBATING COURSE SAME		!	I.D. of surface casing (If present) I.D. of riser pipe: Type of riser pipe: Carbon steel or galvanized (no Diameter of borehole: Type of filler:	[<u>ND</u>] [<u>1.5-in</u>] m) [<u>7-in nom</u>]	
	4000	l	Sand pack (now) Elevation/depth top of seal Type of seal: None documented Description of perforations: None documented		
NOTE: Documentation is very poor. Drillers logs mention use of screen, gravel and sand pack and pulling casing. Depths of gravel/sand pack not documented. Casing size not documented.	000 000 000 4 000 000	•	Screen 28+38-ft (nom) Gravel pack (nom)		
Drawing By: RKL/1#N-08S.ASB Date:			Depth bottom of borehole:	[<u>40-ft</u>]	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-8S

WELL DESIGNATION 199-N-8S

100-Aggregate Area **CERCLA UNIT**

RCRA FACILITY NA

N 86,798 W 60,789 N 491,944 E 2,234,339 HANFORD COORDINATES : LAMBERT COORDINATES :

Jun66 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 40-ft ND

DEPTH TO WATER (GS) :

16.0-ft, Jun66; 17.1-ft Jul91 1.5-in carbon or galvanized steel, +ND+28-ft CASING DIAMETER

ELEV TOP CASING 404.57-ft ELEV GROUND SURFACE : ND PERFORATED INTERVAL : NA

28+38-ft, material/slot not documented SCREENED INTERVAL

FIELD INSPECTION, none COMMENTS

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements;

Water levels measured 06Jun66+31Jul91

None documented PUMP TYPE

MAINTENANCE

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: Bigham Lic Nr: Not documented Drilling Company: Hatch Drilling Co Date Date Started: 04Jun66 Complete: 07Jun66		WELL TEMPORARY NUMBER: 199-N-8T WELL NO: Hanford Coordinates: N/S N 86,784 E/W W 60,803 State Coordinates: N 491,930 E 2,234,299 Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented			
Depth to water: 14.0-ft Jun66 (Ground surface) GENERALIZED Driller's		Elevation of reference point: [404.61-ft] (top of casing) Height of reference point above[ND]			
STRATIGRAPHY Log		ground surface			
0+21: COBBLES and GRAVEL 21+30: Heaving SAND 30 : Heaving coarse SAND		Type of surface seal: None documented			
, , , , , , , , , , , , , , , , , , ,		<pre>1.D. of surface casing [ND] (If present)</pre>			
		I.D. of riser pipe: [<u>1.5-in</u>] Type of riser pipe: Carbon steel or galvanized (nom)			
·	-	Diameter of borehole: [_7-in_nom1			
		Type of filler: Sand pack (now)			
	-	Elevation/depth top of seal Type of seal:None_documented			
1	000 000 000 000	Description of perforations: None documented			
and pulling casing. Depths of 000=	#000 #000				
Casing size not documented.	©000 ©000	Gravel pack (nom)			
000-		Depth bottom of borehole: [30-ft]			
Drawing By: RKL/1#N-08T.ASB Date:					
Reference: HANFORD WELLS					

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-8T

199-N-8T WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area NA RCRA FACILITY N 86,784 W 60,803 HANFORD COORDINATES : N 491,930 E 2,234,299 LAMBERT COORDINATES :

Jun66 DATE DRILLED DEPTH DRILLED (GS) : 30-ft MEASURED DEPTH (GS) :

DEPTH TO WATER (GS) :

14.0-ft, Jun66; 1.5-in carbon or galvanized steel, +ND+20-ft CASING DIAMETER

ELEV TOP CASING 404.61-ft

ELEV GROUND SURFACE : ND PERFORATED INTERVAL :

20+30-ft, material/slot not documented SCREENED INTERVAL

FIELD INSPECTION, none COMMENTS

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA LISTED USE None

PUMP TYPE Continous sample pump

MAINTENANCE

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WELL	CONSTRUCTION AND	COMPLETION SURMARY
Drilling Additiv Fluid Used: Not documented Used: Driller's WA Stat	Not documented Not documented n:Pasco, WA	WELL TEMPORARY NUMBER: 199-N-8U WELL NO: Hanford Coordinates: N/S N 86,816 E/W W 60,770 State Coordinates: N 491,962 E 2,234,294 Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented
Depth to water: 14.0-ft May66 (Ground surface) GENERALIZED Driller's STRATIGRAPHY Log		Elevation of reference point: [404.59-ft (top of casing) Height of reference point above[ND ground surface Depth of surface seal [ND
0+20: Not documented		Type of surface seal: None documented I.D. of surface casing [ND (If present) I.D. of riser pipe: [1.5-in Type of riser pipe: Carbon steel or galvanized (nom)
		Diameter of borehole: [7-in nom Type of filler: Sand pack (now) Elevation/depth top of seal Type of seal:None documented Description of perforations: None documented
NOTE: This well is one of a group of seven small diameter wells. Documentation is very poor. Drillers logs mention use of screen, gravel and sand pack and pulling casing. Depths of gravel/sand pack not documented. Casing size not documented.	Documented as plugged	Screen 18+20-ft (nom) Gravel pack (nom) Depth bottom of borehole: [_20-ft
Drawing By: RKL/1#N-08U.ASB Da	ate:	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-8U

199-N-8U WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 86,816 W 60,770 N 491,962 E 2,234,294 May66 20-ft HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

14_0-ft, May66; 1.5-in carbon or galvanized steel, +ND+*18-ft CASING DIAMETER

404.59-ft ELEV TOP CASING ELEV GROUND SURFACE : NO

PERFORATED INTERVAL : NA

18-20-ft, material/slot not documented SCREENED INTERVAL

FIELD INSPECTION, none; Documented as plugged. COMMENTS

None

AVAILABLE LOGS Driller TV SCAN COMMENTS NA NA DATE EVALUATED **EVAL RECOMMENDATION:** NA

LISTED USE None documented PUMP TYPE

MAINTENANCE ND

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WELL CON	STRUCTION AND	COMPLETION SUMMARY
Drilling Additives Fluid Used: Not documented Used: Not Driller's WA State	documented	WELL TEMPORARY NUMBER: 199-N-8V WELL NO: Hanford Coordinates: N/S N 86,776 E/W W 60,811 State Coordinates: N 491,922 E 2,234,291 Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented
Depth to water: Dry well (Ground surface) GENERALIZED Driller's Documented "Bent over 0+15: COBBLES, GRAVEL and some coarse SAND NOTE: This well is one of a group of seven small diameter wells. Documentation is very poor. Drillers logs mention use of screen, gravel and sand pack and pulling casing. Depths of gravel/sand pack not documented. Casing size not documented.	000 2000 000 20	Elevation of reference point: [404.61-ft] (top of casing) Height of reference point above[ND ground surface Depth of surface seal [ND] Type of surface seal: None documented I.D. of surface casing [ND] I.D. of riser pipe: [1.5-in] Type of riser pipe: [2arbon steel or galvanized (nom)] Diameter of borehole: [7-in nom] Type of filler: Gravel pack (nom) Gravel pack (nom) Depth bottom of borehole: [15-ft]
Drawing By: <u>RKL/1#N-08U.ASB</u> Date: Reference: <u>HANFORD WELLS</u>	-	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-8V

WELL DESIGNATION : 199-N-8V

CERCLA UNIT : 100-Aggregate Area

RCRA FACILITY : NA

HANFORD COORDINATES: N 86,776 W 60,811 LAMBERT COORDINATES: N 491,922 E 2,234,291

DATE DRILLED : Jun66
DEPTH DRILLED (GS): 15-ft
MEASURED DEPTH (GS): ND
DEPTH TO WATER (GS): Dry

DEPTH TO WATER (GS): Dry
CASING DIAMETER: 1.5-in carbon or galvanized steel, +ND+~10-ft

ELEV TOP CASING : 404.61-ft
ELEV GROUND SURFACE : ND

ELEV GROUND SURFACE : ND PERFORATED INTERVAL : NA

SCREENED INTERVAL : 5-10-ft, material/slot not documented

COMMENTS : FIELD INSPECTION, none;
Documented as bent over.

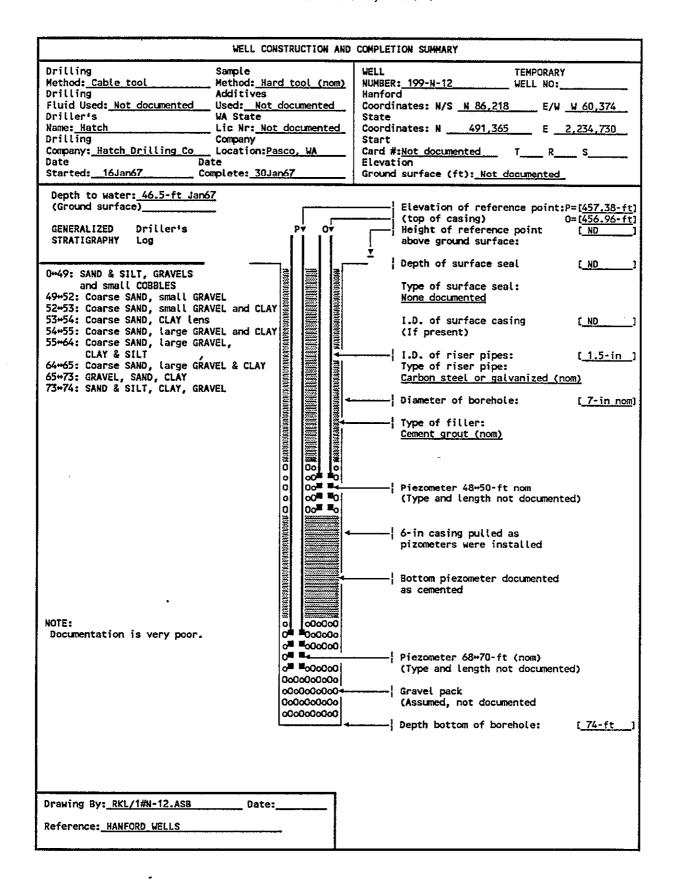
AVAILABLE LOGS : Driller
TV SCAN COMMENTS : NA
DATE EVALUATED : NA
EVAL RECOMMENDATION : NA
LISTED USE : None

PUMP TYPE : None documented

MAINTENANCE : ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-12

199-N-12 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area RCRA FACILITY НA N 86,218 W 60,374 N 491,365 E 2,234,730 HANFORD COORDINATES : LAMBERT COORDINATES :

Jan67 DATE DRILLED DEPTH DRILLED (GS) : 74-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

46.5-ft, Jan67; P piezometer tube, 1.5-in carbon or galvanized steel, +ND+-68-ft O piezometer tube, 1.5-in carbon or galvanized steel, +ND+-48-ft CASING DIAMETER

ELEV TOP CASING P = 457.38 - ft0 = 456.96-ft

ELEV GROUND SURFACE : ND

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PERFORATED INTERVAL : NA

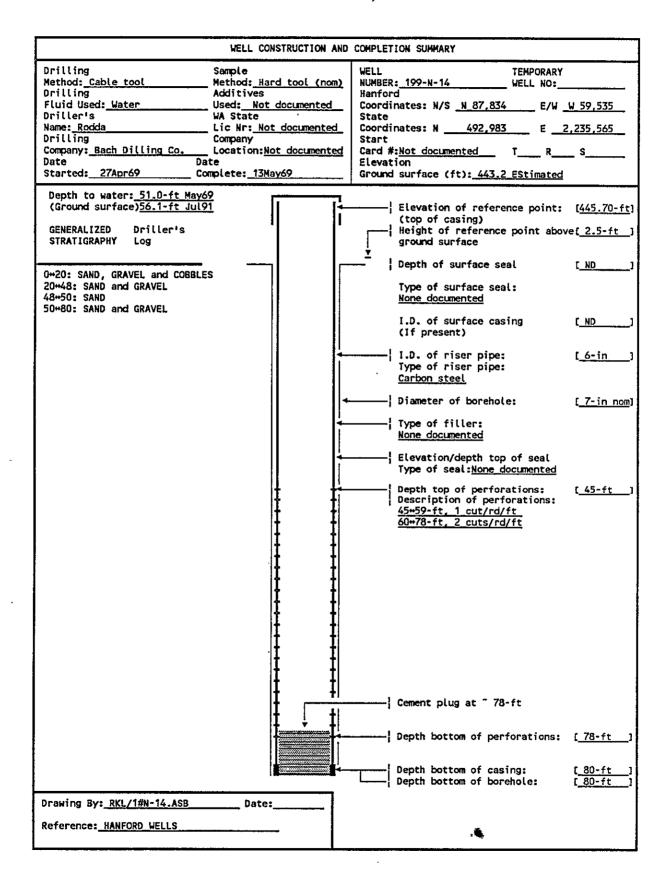
P = $68 \div 70$ -ft nominal, material/slot not documented 0 = $48 \div 50$ -ft nominal, material/slot not documented SCREENED INTERVAL

COMMENTS FIELD INSPECTION, none

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA LISTED USE None

None documented PUMP TYPE

MAINTENANCE ND



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-14

199-N-14 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 1301-N

N 87,834 W 59,535 N 492,983 E 2,235,565 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED May69 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 80-ft ND

51.0-ft, May69; 56.1-ft Jul91 DEPTH TO WATER (GS) :

6-in carbon steel, +2.5+~80-ft 445.70-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 443.2-ft Estimated

PERFORATED INTERVAL : 45**↔**78-ft SCREENED INTERVAL NA

COMMENTS

FIELD INSPECTION, 25Apr91; Carbon steel. No pad, no posts,

capped, and locked.

No permanent identification. Driller

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

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RCRA monthly water level measurements, quarterly sampling; Water levels measured 06May70+30Jul91 LISTED USE

Electric submersible PUMP TYPE

MAINTENANCE NO



WELL CONSTRUCTION AND COMPLETION SUMMARY			
	ple hod: <u>Hard tool (</u> nom)	WELL TEMPORARY NUMBER: 199-N-15 WELL NO:	
Drilling Add	itives	Hanford N-Area	
	d: Not documented	Coordinates: N/S N 6,659 E/W	W 5,569
	State Nr:_Not_documented_	State Coordinates: N ND E	110
	pany	Coordinates: N ND E	_ NU
Company: Bach Dilling Co. Loc	ation: <u>Not documented</u>	Card #:Not documented TR	_ s
Date Date Started: 15May69 Comple	te: 31May69	Elevation	_
Started: (SMayoy Compte	ces 3 Imayoy	Ground surface (ft): 454.4 Estimated	
Depth to water: 57.0-ft May69			
(Ground surface)58.2-ft Feb89	-	Elevation of reference point:	[<u>456.94-ft</u>]
GENERALIZED Driller's	4 11	(top of casing)	ar 2 55-f+ 1
STRATIGRAPHY Log		ground surface	01 <u>_2.55_76_</u> 1
		<u> •</u>	
0+12: BOULDERS, COBBLES, GRAVEL		Depth of surface seal	[<u>ND</u>]
and SAND-slightly cemented		Type of surface seal:	
12+80: SAND and GRAVEL		None documented	
· ·		I D. of ourfood assiss	
		<pre>I.D. of surface casing (If present)</pre>	[<u>ND</u>]
1		(1) probently	
4	+	I.D. of riser pipe:	[<u>8-in</u>]
		Type of riser pipe: Carbon steel	
<u> </u>		GOLDON SECCE	
		Diameter of borehole:	[<u>9-in_nom</u>]
İ		Time of fillers	
		Type of filler: None documented	
		Elevation/depth top of seal	
		Type of seal: None documented	
		Depth top of perforations:	[<u>50-ft</u>]
		Description of perforations: 50+65-ft, 1 cut/rd spiraled	
	II I	65+78-ft, 2 cuts/rd/ft	
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	† †	Depth bottom of perforations:	[<u>78-ft</u>]
İ	<u> </u>	Depth bottom of casing:	[<u>80-ft</u>]
		Depth bottom of borehole:	[80-ft]
Drawing By: RKL/1#N-15.ASB	_ Date:		
· · ·			
Reference: HANFORD WELLS			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-15

WELL DESIGNATION 199-N-15

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

HANFORD COORDINATES : N-Area N 6,659 W 5,566

LAMBERT COORDINATES : E ND N ND

May69 DATE DRILLED DEPTH DRILLED (GS) : 125-ft MEASURED DEPTH (GS) : ND

57.0-ft, May64; 58.2-ft Feb89 DEPTH TO WATER (GS) :

CASING DIAMETER 8-in carbon steel, +2.55+~80-ft

456.94-ft ELEV TOP CASING

ELEV GROUND SURFACE : 454.4-ft, Estimated

PERFORATED INTERVAL : 50+78-ft SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 28Mar90,

Carbon steel casing.

No pad, No posts, capped not locked. (Hasp repaired Apr90)

No permanent identification.

Controlled access zone.

Oriller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

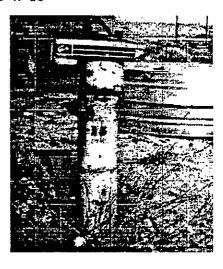
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Water levels measured 06May70+24Feb89 LISTED USE

PUMP TYPE Electric submersible

21Jul77; - Brushed casing, bailed debris 22Jun82; - Brushed casing, bailed debris MAINTENANCE



	WELL CONSTRUCTION AND	COMPLETION SUMMARY		
Method: Rotary Met	mple thod: <u>Air returns</u>	WELL NUMBER: 199-N-16	TEMPORARY WELL NO:	
Drilling Add	ditives ed: Foam, Torq Trim	Hanford N-Area		
Driller's WA	State	State	N 6,087 E/W _	
Name: Nelson ? Lic	: Nr: Not documented	Coordinates: N No	ot documented E Not	documented
Drilling Com Company: <u>Nelson Well Drilling</u> Loc	mpany cation: Pasco. WA	Start Card #:Not docume	entedTR	r.
Date Date	-	Elevation		
Started: 09Feb81 Comple	ete: 10Feb81	Ground surface (f	t): 453.5 Estimated	
Depth to water: 57.5-ft Feb81	I			
(Ground surface)63.8-ft Jul91	-	Elevation	of reference point:	[<u>456.70-ft</u>]
GENERALIZED Driller's	- 4 P	(top of ca	sing) reference point abov	∕41 3 2-ft 1
STRATIGRAPHY Log		ground sur		101 <u>-205-</u> 0
		<u> </u>	surface seal	[10-ft nom]
0+4: GRAVEL and COBBLES with SILT	·]	• •		(<u>10-1 (136m</u>)
4+15: GRAVEL and COBBLES with BOULDERS, SAND		Type of su <u>Cement gro</u>	rface seal:	
15+20: GRAVEL with SAND, COBBLES,		CEMENT NO.	<u>ut</u>	
and BOULDERS			rface casing	[<u>ND</u>]
20+40: GRAVEL and SAND 40+45: GRAVEL, COBBLES and SAND		(If presen	it)	
45+79: GRAVEL and SAND	<u> </u>	1.D. of ri		[<u>8-in</u>]
79+80: Not documented		Type of ri	ser pipe:	
		<u>Carbon ste</u>	<u>el</u>	
	 	Depth top	of perforations:	[<u>12-ft</u>]
REMEDIATION: 19*Apr84 by M. Bultena	lt t	Description Not docume	n of perforations:	
Cleaned well. Installed	I	NOT_GOCGIA	nteg	
telescoping screen.	}	Diameter o	f borehole:	[<u>9-in nom</u>]
	t t <u>.</u>	Type of fi	11an	
	 	None docum		
	1 1	! Elevation/	depth top of seal	
	14V VA		al:None documented	
•	 			
	1 1			
			g screen, 6-in nomin	nal
	M M M M M M M M M M	51.5 + 78.5-		
			ainless steel in pipe with	
		flare on to		
	計畫 豊仁		•••	
	11 11			
	 			
	t = = t			
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	† = = † *	Depth botte	om of perforations:	[<u>78-ft</u>]
	Fill?			
	<u> </u>		om of casing:	[<u>"80-ft</u>]
		L Depth botto	om of borehole:	[<u>80-ft</u>]
Drawing By: RKL/1#N-16,ASB	Date:			
Reference: HANFORD WELLS				
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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-16

WELL DESIGNATION 199-N-16

CERCLA UNIT 100-Aggregate Area

1301-N, 1324-N/NA Assessment N-Area N 6,087 W 6,158 RCRA FACILITY HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E NO

DATE DRILLED Feb81 DEPTH DRILLED (GS) : 80-ft MEASURED DEPTH (GS) :

57.5-ft, Feb81; 63.8-ft Jul91 DEPTH TO WATER (GS) :

8-in carbon steel, +3.2+~80-ft CASING DIAMETER

ELEV TOP CASING 456.70-ft

ELEV GROUND SURFACE : 453.5-ft Estimated

12+78-ft PERFORATED INTERVAL :

51.5+78.5-ft, 10-slot, stainless steel, 6-in nominal telescoping FIELD INSPECTION, 15Aug89, SCREENED INTERVAL

COMMENTS Carbon steel casing.

No pad, 4 posts, capped, and locked. No permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 31Mar89+30Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-17

WELL DESIGNATION 199-N-17

CERCLA UNIT

100-Aggregate Area 1301-N, 1324-N/NA Assessment RCRA FACILITY N-Area N 6,902 W 6,518 HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E ND

Jan81 DATE DRILLED DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): 84.5-ft

ND

63.0-ft, Jan81; 70.1-ft, Jul91

CASING DIAMETER 8-in carbon steel, +3.0+ 84.5-ft

ELEV TOP CASING 461.20-ft

ELEV GROUND SURFACE : 458.2-ft Estimated

12+83-ft PERFORATED INTERVAL : SCREENED INTERVAL NA

FIELD INSPECTION, 15Aug89, COMMENTS

Carbon steel casing.

No pad, 4 posts, capped, and locked. No permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA NA DATE EVALUATED **EVAL RECOMMENDATION:** NA

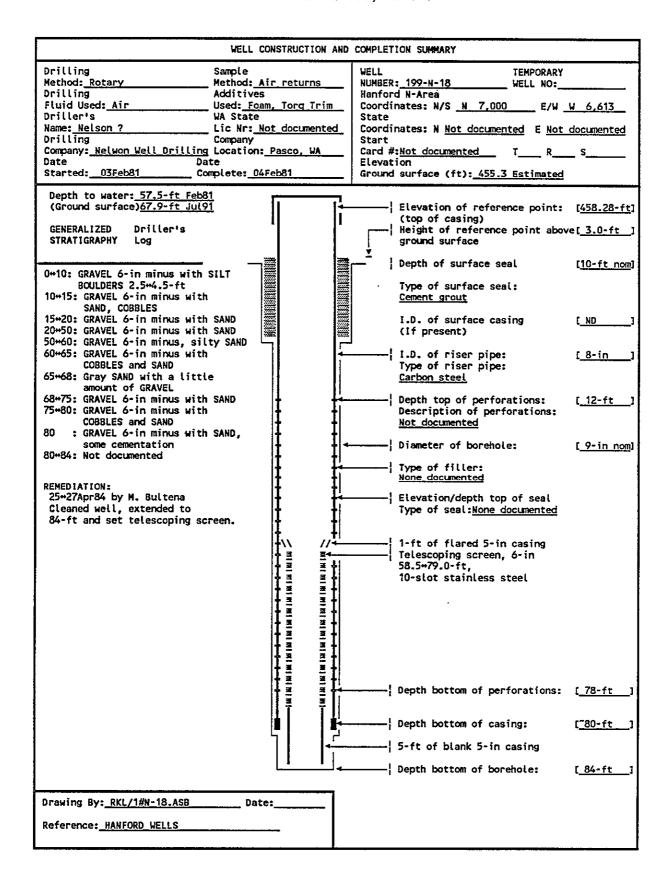
LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 22Jul87+30Jul91

PUMP TYPE Electric submersible

MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-18

WELL DESIGNATION 199-N-18

CERCLA UNIT

100-Aggregate Area 1301-N, 1324-N/NA Assessment RCRA FACILITY N-Area N 7,000 W 6,613 N ND E ND HANFORD COORDINATES :

LAMBERT COORDINATES :

DATE DRILLED Feb81 DEPTH DRILLED (GS) : 80-ft ND

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 62.0-ft, Feb81;

67.9-ft, Jul91

8-in carbon steel, +3.0+780-ft CASING DIAMETER

458.28-ft ELEV TOP CASING ELEV GROUND SURFACE : 455.3-ft Estimated

PERFORATED INTERVAL : 12+78-ft

SCREENED INTERVAL 58.5+79.0-ft, 10-slot, stainless steel,

6-in nominal telescoping FIELD INSPECTION, 15Aug89,

COMMENTS Carbon steel casing.

No pad, 2 posts, capped, and locked.

No permanent identification. Driller

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

RCRA monthly water level measurements, quarterly sampling; dropped from LISTED USE

RCRA monitoring network after Feb90 sampling; Water levels measured 22Jul87~30Jul91

PUMP TYPE Electric submersible

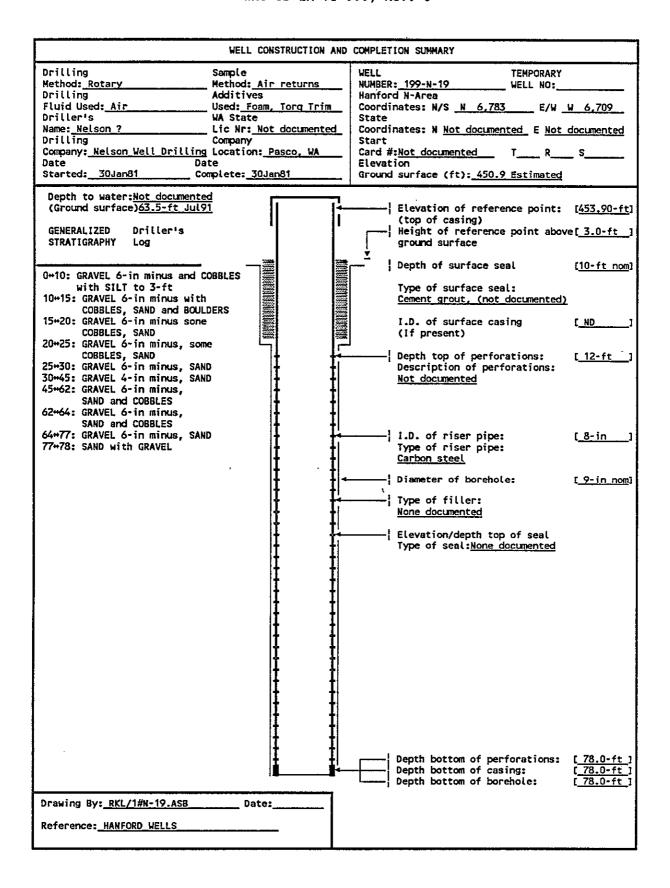
MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-19

199-N-19 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : N-Area N 6,783 W 6,709

LAMBERT COORDINATES : N ND END

DATE DRILLED Jan81 DEPTH DRILLED (GS): MEASURED DEPTH (GS): 78.0-ft

ND

DEPTH TO WATER (GS) : Not documented;

63.5-ft, Jul91 8-in carbon steel, +3.0+"78.0-ft CASING DIAMETER

ELEV TOP CASING : ELEV GROUND SURFACE :

453.90-ft 450.9-ft Estimated

PERFORATED INTERVAL : 12+78-ft NA

SCREENED INTERVAL

FIELD INSPECTION, 15Aug89, COMMENTS

Carbon steel casing.

No pad, 4 posts, capped, and locked. No permanent identification.

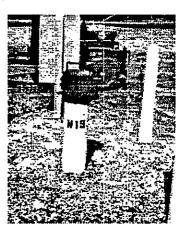
AVAILABLE LOGS Driller TV SCAN COMMENTS : NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements; Water levels measured 22Jul87+30Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND

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WELL CONST	CTION AND COMPLETION SUMMAR	Y
Drilling Sample Method: Rotary Method: Air r Drilling Additives Fluid Used: Air Used: Foam, T Driller's WA State Name: Nelson ? Lic Nr: Not of Drilling Company Company: Nelson Well Drilling Location: Pas Date Date Started: 21Jan81 Complete: 27Jan8	Hanford N-Area Coordinates: N/S State Coordinates: N N Start Card #:Not docum Elevation	N 6,646 E/W W 6,680 ot documented E Not documented
Depth to water: 62.0-ft Jan81 (Ground surface)64.9-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+10: GRAVEL 6-in minus with SILT binder at 3-ft 10+20: GRAVEL 6-in minus, BOULDERS 20+25: GRAVEL 6-in minus with BOULDERS, SAND 25+30: GRAVEL 2-in minus with SAND and COBBLES 30+80: GRAVEL 2-in minus with SAND	Depth of state	reference point above 3.0-ft rface surface seal [10-ft nom] urface seal: out urface casing [ND] nt) of perforations: [12-ft] on of perforations: 2.3/8-in iser pipe: [8-in] iser pipe: [9-in nom] iller:
Drawing By: <u>RKL/1#N-20.ASB</u> Date:		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-20

199-N-20 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

HANFORD COORDINATES : N-Area N 6,646 W 6,680

LAMBERT COORDINATES : N ND E ND

Jan81 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 80.0-ft

ND DEPTH TO WATER (GS) :

62.0-ft, Jan81; 64.9-ft, Jul91 8-in carbon steel, +3.0+"80.0-ft CASING DIAMETER

ELEV TOP CASING 455.90-ft 452.9-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : 12+78-ft

SCREENED INTERVAL NA

FIELD INSPECTION, 15Aug89, COMMENTS

Carbon steel casing.

No pad, 4 posts, capped, and locked.

No permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA : EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements;

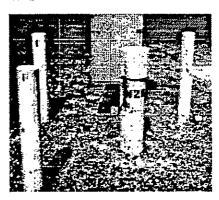
Water levels measured 22Jul87+30Jul91

PUMP TYPE None MAINTENANCE ND

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WELL (CONSTRUCTION AND	D COMPLETION SUMMARY
Drilling Additives Fluid Used: Air Used: For Driller's WA State	om, Torq Trim Not documented Pasco, WA	Start Card #:Not documented T R S Elevation Ground surface (ft): 454.0-Estimated Elevation of reference point: [457.00-ft]
GENERALIZED Driller's STRATIGRAPHY Log		(top of casing) Height of reference point above [3.0-ft ground surface Depth of surface seal [10-ft nom
0+6: GRAVEL and COBBLES with SILT binder 6+9: BOULDER 9+15: COBBLES and GRAVEL 15+20: COBBLES and GRAVEL with SAND 20+25: COBBLES and GRAVEL, SAND with a trace of SILT 25+30: COBBLES, GRAVEL, SAND 30+40: GRAVEL 6-in minus, SAND 40+45: GRAVEL 4-in minus, SAND 55+79.5: GRAVEL 6-in minus, SAND		Type of surface seal: Cement grout I.D. of surface casing [ND (If present) Depth top of perforations: [12-ft Description of perforations: Not documented
		Type of filler: None documented
Drawing By: RKL/1#N-21.ASB Dag Reference: HANFORD WELLS	ate:	Depth bottom of casing: [79.5-ft] Depth bottom of borehole: [79.5-ft]

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-21

199-N-21 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

1301-N, 1324-N/NA Assessment N-Area N 6,522 W 6,707 RCRA FACILITY HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E NO

DATE DRILLED Jan81 79.5-ft DEPTH DRILLED (GS) : ND

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

60.0-ft, Jan81; 66.1-ft, Jul91 8-in carbon steel, +3.0+79.5-ft CASING DIAMETER

ELEV TOP CASING 457.00-ft

454.0-ft Estimated 12+77.6-ft ELEV GROUND SURFACE :

PERFORATED INTERVAL :

SCREENED INTERVAL

COMMENTS FIELD INSPECTION, 25Apr91,

Carbon steel casing.

No pad, 4 posts, capped, and locked.

No permanent identification. Driller

AVAILABLE LOGS TV SCAN COMMENTS DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 26Apr89+30Jul91

Electric submersible PUMP TYPE

MAINTENANCE

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WELL	CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Additiv Fluid Used: Air Used: Fuiller's WA State	oam, Torq Trim te Not documented on: Pasco, WA	WELL TEMPORARY NUMBER: 199-N-22 WELL NO: Hanford N-Area Coordinates: N/S N 6,340 E/W W 6,762 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 454.2 Estimated
Depth to water: 62.0-ft Jan81 (Ground surface) GENERALIZED Driller's STRATIGRAPHY Log	Temporar	Elevation of reference point: [457.10-ff (top of casing) Height of reference point above[2.9-ft ground surface
0+25: Not legibly documented 25+35: GRAVEL 6-in minus grading to 3-in		Depth of surface seal <u>[10-ft now</u> Type of surface seal: Cement grout
35+60: GRAVEL 3-in with SAND 60+79: GRAVEL 6-in minus with SAND		1.D. of surface casing [<u>ND</u> (If present)
*		I.D. of riser pipe: [<u>8-in</u> Type of riser pipe: Carbon steel
		Depth top of perforations: [12-ft Description of perforations: Not documented
		Diameter of borehole: [9-in no
	# #	Type of filler: None documented
		Type of seal: None documented
		Telescoping screen, 6-in
REMEDIATION: 24+25Apr84 by M. Bultena Cleaned well and set telescoping screen		10-slot stainless steel 1-ft flared 5-in casing on top
	*** NO ***	Depth bottom of perforations: [_77-ft
		Depth bottom of casing: [<u>-79-ft</u>
	= = -	Depth bottom of borehole: [<u>*80-ft</u>
Drawing By: RKL/1#N-22.ASB	Date:	
Reference: HANFORD WELLS		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-22

199-N-22 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N-Area N 6,340 W 6,762 HANFORD COORDINATES : LAMBERT COORDINATES :

N ND E ND

Jan81 DATE DRILLED DEPTH DRILLED (GS) : 79-ft MEASURED DEPTH (GS) :

DEPTH TO WATER (GS) :

62.0-ft, Jan81; 8-in carbon steel, +2.9**79-ft CASING DIAMETER

457.10-ft ELEV TOP CASING

454.2-ft Estimated 12+77-ft ELEV GROUND SURFACE :

PERFORATED INTERVAL :

58.5+80.0-ft, 10-slot, stainless steel, 6-in nominal telescoping FIELD INSPECTION, 28Sep89, SCREENED INTERVAL

COMMENTS

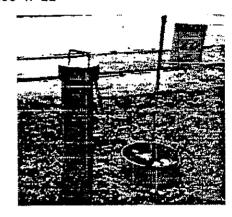
Carbon steel casing.

No pad, no posts, capped, and locked. No permanent identification.

AVAILABLE LOGS Driller

TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : HA LISTED USE None None PUMP TYPE MAINTENANCE ND

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WE	ELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Addit Fluid Used: Air Used: Driller's WA S: Name: Nelson ? Lic Drilling Company: Nelson Well Drilling Locat Date Date	d: Air returns ives Foam, Torq Trim ate fir: Not documented	WELL TEMPORARY NUMBER: 199-N-23 WELL NO: Hanford N-Area Coordinates: N/S N 6,232 E/W W 6,784 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented
Depth to water:58.4-ft Jan81 (top-of-casing)68.8-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+10: GRAVEL 6-in minus with SAND and SILT binder 10+25: GRAVEL 6-in minus with SAND 25+50: GRAVEL 3-in minus, SAND 50+70: GRAVEL 6-in minus, SAND, si		Elevation of reference point: [456.30-ft] (top of casing) Height of reference point above[ND ground surface Depth of surface seal [10-ft nom] Type of surface seal: Cement grout I.D. of surface casing (IND (If present) Depth top of perforations: Not documented Description of perforations: Not documented Diameter of borehole: [9-in nom] Type of filler: None documented Elevation/depth top of seal Type of seal: None documented Depth bottom of perforations: [78.0-ft] Depth bottom of casing: [80.0-ft] Depth bottom of borehole: [80.0-ft]
Drawing By: RKL/1#N-23,ASB Reference: HANFORD WELLS	_ Date:	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-23

WELL DESIGNATION 199-N-23

CERCLA UNIT

100-Aggregate Area 1301-N, 1324-N/NA Assessment N-Area N 6,232 W 6,784 RCRA FACILITY HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E ND

Jan81 DATE DRILLED DEPTH DRILLED (GS) : 80.0-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

58.4-ft, Jan81; 8-in carbon steel, +ND+"80.0-ft CASING DIAMETER

ELEV TOP CASING 457.00-ft ELEV GROUND SURFACE : ND PERFORATED INTERVAL : 12478.0-ft

SCREENED INTERVAL

COMMENTS FIELD INSPECTION, none

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; dropped from monitoring LISTED USE

network after Feb90 sampling; Water levels measured 31Mar89+30Jul91

PUMP TYPE None documented

MAINTENANCE ND

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Additi Fluid Used: Air Used: Driller's WA Sta Name: Nelson ? Lic Nr Drilling Compan Company: Nelson Well Drilling Locati Date Date Started: 06Jan81 Complete: Depth to water: 34.0-ft Jan81	: Air returns ves Foam, Torq Trim te : Not documented y on: Pasco, WA	WELL TEMPORARY NUMBER: 199-N-24 WELL NO: Hanford N-Area Coordinates: N/S N 6,049 E/W W 6,892 State Coordinates: N Not documented E Not documented Start . Card #:Not documented T R S Elevation Ground surface (ft): Not documented		
(top-of-casing)40,8-ft Aug90 GENERALIZED Driller's STRATIGRAPHY Log		Elevation of reference point: [432.50-ft] (top of casing) Height of reference point above[ND] ground surface Depth of surface seal [10-ft nom]		
0+10: GRAVEL with BOULDERS, SILT binder and SAND 10+15: GRAVEL with COBBLES, SAND 15+20: GRAVEL 6-in with SAND 20+30: COBBLES 4-in minus with increasing SAND with a trace of SILT 30+35: GRAVEL 2-in minus with		Depth top of perforations: [<u>12-ft</u>]		
SAND, silty 35+50: GRAVEL 2-in minus with SAND, silty 50+55: GRAVEL, 2-in minus with increasing SAND, silty		Description of perforations: Not documented 1.D. of riser pipe: [8-in]		
		Type of riser pipe: Carbon steel Diameter of borehole: Type of filler: None documented		
		Elevation/depth top of seal Type of seal: <u>None documented</u>		
		Depth bottom of perforations: [_54.0-ft Depth bottom of casing: [_55.0-ft Depth bottom of borehole: [_55.0-ft		
Drawing By: <u>RKL/1#N-24.ASB</u> Reference: <u>HANFORD WELLS</u>	Date:			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-24

199-N-24 WELL DESIGNATION

CERCLA UNIT

100-Aggregate Area 1301-N, 1324-N/NA Assessment N-Area N 6,049 W 6,892 RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES : N ND E ND

Jan81 DATE DRILLED 55.0-ft DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

34.0-ft, Jan81; 40.8-ft, Aug90 (top-of-casing) 8-in carbon steel, +ND+"55.0-ft CASING DIAMETER

ELEV TOP CASING 432.50-ft ELEV GROUND SURFACE : ND PERFORATED INTERVAL : 12+54-ft

SCREENED INTERVAL NA

FIELD INSPECTION, none COMMENTS

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

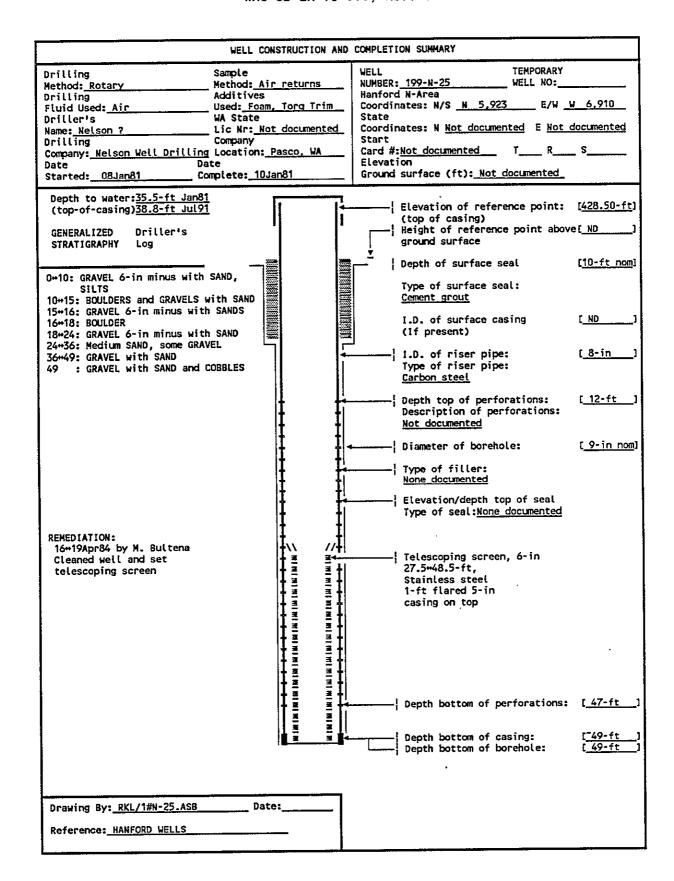
LISTED USE RCRA monthly water level measurements, quarterly sampling; dropped from monitoring

network after Feb90 sampling; Water levels measured 31Mar89+30Aug90

PUMP TYPE None documented

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-25

WELL DESIGNATION 199-N-25 :

100-Aggregate Area CERCLA UNIT

1301-N, 1324-N/NA Assessment RCRA FACILITY N-Area N 5,923 W 6,910 N ND E ND

HANFORD COORDINATES : LAMBERT COORDINATES : N ND

Jan81 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 49-ft ND

DEPTH TO WATER (GS) :

35.5-ft, Jan81; 38.8-ft, Jul91 (top-of-casing) 8-in carbon steel, +ND+-49-ft CASING DIAMETER

425.80-ft ELEV TOP CASING ELEV GROUND SURFACE : ND 12+47-ft PERFORATED INTERVAL :

SCREENED INTERVAL

26.5+48.5-ft, stainless steel, 6-in nominal telescoping FIELD INSPECTION, none

COMMENTS AVAILABLE LOGS Driller TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; dropped from RCRA monitoring network after Feb90 sampling; Water levels measured 20Apr89+30Jul91 LISTED USE

None documented PUMP TYPE

MAINTENANCE

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WELL CONSTRU	TION AND COMPL	ETION SUMMARY	
Drilling Sample Method: Rotary Method: Air ret Drilling Additives Fluid Used: Air Used: Foam, Tot Driller's WA State Name: Nelson ? Lic Nr: Not dot Company Company: Nelson Well Drilling Location: Pasce Date Started: 31Dec80 Complete: 03Jan81	Hanf Trim Coor Stat mented Coor Star UA Card	ER: 199-N-26 WELL NO: ord N-Area dinates: N/S N 5,705 E/W 1 e dinates: N Not documented E Not o	documented
Depth to water:63.0-ft Jan81 (top-of-casing)39,4-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+10: GRAVEL with COBBLES and SAND with SILT		- Elevation of reference point: (top of casing) - Height of reference point abov ground surface Depth of surface seal Type of surface seal:	
0+10: GRAVEL with COBBLES and SAND with SILT 10+15: GRAVEL with COBBLES and SAND 15+20: GRAVEL with some SAND 20+45: GRAVEL 6-in with SAND 45+50: GRAVEL 3-in with SAND, SILT 50+55: GRAVEL 3-in, COBBLES, SAND more SILT 55+79: GRAVEL 3-in, SAND silty		Cement grout I.D. of surface casing (If present)	[<u>ND</u>]
		Depth top of perforations: Description of perforations: Not documented Diameter of borehole: Type of filler: None documented Elevation/depth top of seal Type of seal:None documented	[_12-ft]
REMEDIATION: 23~24aApr84 by M. Bultena Set telescoping screen	/	Telescoping screen, 6-in 61.0~81.5-ft, 10-slot stainless steel 1-ft flared 5-in casing on top	
	M - 20 21 22 23 24 26 26 26 26 26 26 26	 Depth bottom of perforations: Depth bottom of casing: Depth bottom of borehole: 	[<u>77-ft</u> [<u>79-ft</u> [<u>"81.5-ft</u>
Drawing By: RKL/1#N-26.ASB Date:			•

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-26

199-N-26 WELL DESIGNATION :

100-Aggregate Area CERCLA UNIT

1301-N, 1324-N/NA Assessment N-Area N 5,705 W 6,797 N ND E ND RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES :

Jan81 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 79-ft ND

63.0-ft, Jan81; DEPTH TO WATER (GS) :

8-in carbon steel, +ND+~79-ft CASING DIAMETER

457.10-ft ELEV TOP CASING ELEV GROUND SURFACE : ND 12+77-ft PERFORATED INTERVAL :

58.5+80.0-ft, 10-slot, stainless steel, 6-in nominal telescoping SCREENED INTERVAL

COMMENTS FIELD INSPECTION,

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; dropped from RCRA monitoring network after Feb90 sampling; Water levels measured 22Aug89+30Jul91 LISTED USE

None documented PUMP TYPE

MAINTENANCE ND

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WELL CONS	TRUCTION AND	COMPLETION SUMMARY
Drilling Sample Method: Cable tool Method: Hard Drilling Additives Fluid Used: Not documented Used: Not d Driller's WA State Name: Bultena Lic Nr: 0066 Drilling Company: Not documented Location: Not Date Date Started: 15Jun83 Complete: 23Aug	documented	WELL TEMPORARY NUMBER: 199-N-27 WELL NO: Hanford N-Area Coordinates: N/S N 7,728 E/W W 4,103 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 447.1 Estimated
Depth to water: 49.0-ft Aug83 (Ground surface)56.9-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+40: COBBLES and BOULDERS 40+50: COBBLES, SAND and SILT 50+69: COBBLES and SAND		Elevation of reference point: [449.08-ft (top of casing)] Height of reference point above[2,0-ft ground surface] Depth of surface seal [_0+718-ft] Type of surface seal: Cement grout, 135 gals I.D. of surface casing [_12-in_ (Pulled back)]
	# _ # # # # # # # # # # # # # # # # # # # _ # # _ # # _ # # _ # # _ # # _ # # _ # _ # # _ #	I.D. of riser pipe: [8-in Type of riser pipe: Carbon steel Diameter of borehole: [9-in non Not documented Elevation/depth top of seal Type of seal:Not documented
		Depth bottom of casing: [
Drawing By: RKL/1#N-27.ASB Date: Reference: HANFORD WELLS		Depth bottom of borehole <u>[_69-ft</u>

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-27

WELL DESIGNATION 199-N-27

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 1325-N

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 7,728 W 4,103

N ND E ND

Aug83 DATE DRILLED DEPTH DRILLED (GS) :
MEASURED DEPTH (GS) :
DEPTH TO WATER (GS) : 69.0-ft ND

49.0-ft, Aug83;

56.9-ft, Jul91

8-in carbon steel, +2.0+ 33-ft CASING DIAMETER

ELEV TOP CASING 449.08-ft

447.1-ft Estimated ELEV GROUND SURFACE : ΝA

PERFORATED INTERVAL : SCREENED INTERVAL

32+69-ft, telescoping, #20-slot, stainless steel

FIELD INSPECTION, 25Apr91;

COMMENTS Carbon steel casing.

2-ft by 2-ft round concrete pad, 4 posts, 2 removable. Capped and locked, no permanent identification. Has Stevens Recorder installed.

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

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RCRA monthly water level measurements, quarterly sampling; Water levels measured 11Sep85+31Jul91 LISTED USE

Electric submersible PUMP TYPE

MAINTENANCE ND

WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: Olson Lic Nr: 1217 Drilling Company: Not documented Date Date Started: 17Sep83 Complete: 20Sep83	WELL TEMPORARY NUMBER: 199-N-28 WELL NO: Hanford N-Area Coordinates: N/S N 7,050 E/W W 4,165 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented			
Depth to water:63.0-ft Sep83 (top-of-casing)74.8-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+14: BOULDERS and COBBLES 14+18: Not documented 18+31: BOULDERS and COBBLES 31+42: Larger BOULDERS and COBBLES 42+58: Small BOULDERS, COBBLES and GRAVEL 58+68: COBBLES, GRAVEL and SAND 68+73: COBBLES, GRAVEL and SAND becoming cemented 73+83: Cemented COBBLES, GRAVEL and SAND				
	I.D. of riser pipe: [8-in] Type of riser pipe: Carbon steel Diameter of borehole: [9-in nom] Type of filler: Not documented Elevation/depth top of seal Type of seal:Not documented			
	Depth bottom of casing: [48-ft] Pulled back from total depth, Telescoping screen 47*83-ft.			
Drawing By: RKL/1#N-28.ASB Date:	◆			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-28

199-N-28 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

HANFORD COORDINATES : N-Area N 7,050 W 4,165

E ND LAMBERT COORDINATES : N ND

DATE DRILLED Sep83 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 83.0-ft ND

63.0-ft, Sep83; DEPTH TO WATER (GS) :

8-in carbon steel, +2.0+748-ft CASING DIAMETER

464.24-ft ELEV TOP CASING ELEV GROUND SURFACE : ND PERFORATED INTERVAL : NA

47-83-ft, telescoping, FIELD INSPECTION, 15Aug89; SCREENED INTERVAL COMMENTS

Carbon steel casing.

2-ft by 2-ft round concrete pad, 4 posts, 2 removable. Capped and locked, no permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

LISTED USE RCRA monthly water level measurements; Water levels measured 11Sep85+31Jul91.

PUMP TYPE Electric submersible

MAINTENANCE

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WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: Olson Lic Nr: 1217 Drilling Company Company: Not documented Location:Not documented Date Date Started: 17Aug83 Complete: 26Aug83	WELL TEMPORARY NUMBER: 199-N-29 WELL NO: Hanford N-Area Coordinates: N/S N 6,943 E/W W 4,525 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 463.5 Estimated
Depth to water: 64.0-ft Aug83 (top-of-casing) 74.8-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log O+4: Not documented 4+13: BOULDERS, COBBLES & GRAVEL 13+14: BOULDERS 14+28: BOULDERS, COBBLES & GRAVEL 28+58: GRAVEL, COBBLES & SAND 58+62: BOULDERS, GRAVEL, COBBLES COBBLES & SAND 62+78: GRAVEL, COBBLES & SAND 78+84: SAND & GRAVEL	Elevation of reference point: [465.25-ft] (top of casing) Height of reference point above[1.7-ft] ground surface Depth of surface seal Type of surface seal: Cement grout, 261-gals I.D. of surface casing (Pulled back)
	I.D. of riser pipe: [8-in] Type of riser pipe: Carbon steel Diameter of borehole: [9-in nom] Type of filler: Not documented Elevation/depth top of seal Type of seal: Not documented
	Depth bottom of casing: [<u>-49-ft</u>] Pulled back from total depth, Telescoping screen 47.5*84-ft.
Drawing By: RKL/1#N-29.ASB Date: Reference: HANFORD WELLS	Depth bottom of borehole [_84-ft]

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-29

WELL DESIGNATION 199-N-29

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 1325-N

HANFORD COORDINATES : N-Area N 6,943 W 4,525

LAMBERT COORDINATES : N ND E ND

Aug83 DATE DRILLED DEPTH DRILLED (GS) : 84.0-ft MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

64.0-ft, Aug83; 74.8-ft, Jul91 (top-of-casing) 8-in carbon steel, +1.7-49-ft CASING DIAMETER

ELEV TOP CASING 465.25-ft ELEV GROUND SURFACE : 463.5-ft, Estimated

PERFORATED INTERVAL :

47.5+84-ft, telescoping, FIELD INSPECTION, 26Apr91; SCREENED INTERVAL COMMENTS

Carbon steel casing.

2-ft by 2-ft round concrete pad, 4 posts, 2 removable. Capped and locked, no permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

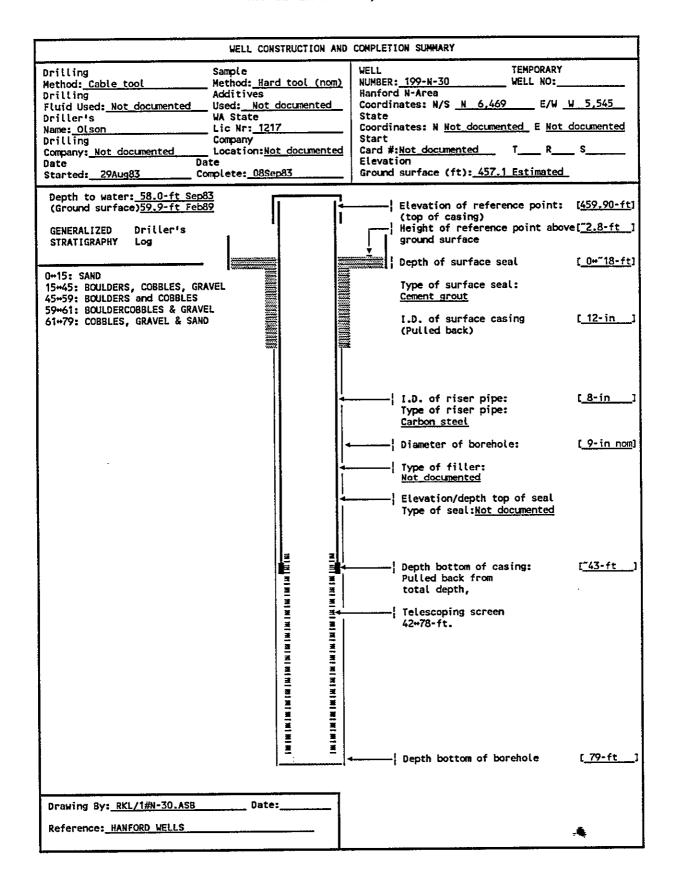
Water levels measured 11Sep85+31Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-30

199-N-30 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 6,469 W 5,545

N ND E ND

Sep83 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 79.0-ft ND

DEPTH TO WATER (GS) :

78.0-ft, Sep83; 59.9-ft, Feb89 8-in carbon steel, +2.8+-43-ft CASING DIAMETER

ELEV TOP CASING : ELEV GROUND SURFACE : 459.90-ft

457.1-ft, Estimated PERFORATED INTERVAL :

SCREENED INTERVAL

42479-ft, telescoping, FIELD INSPECTION, 28Mar90; COMMENTS

Carbon steel casing. Upper 3-ft of casing

has been cut off and replaced.

No pad, no posts, Not capped and locked, (Hasp repaired Apr90)

no permanent identification. In radiation zone. Driller

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA

EVAL RECOMMENDATION : NA

Water levels measured 11Sep85+24Feb89 LISTED USE

PUMP TYPE MAINTENANCE Electric submersible?

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
	Sample Method: <u>Hard tool (nom)</u> Additives Used: <u>Not documented</u> WA State Lic Nr: 0066 Company Location: Not documented te mplete: 23Sep83	WELL TEMPORARY NUMBER: 199-N-31 WELL NO: Hanford N-Area Coordinates: N/S N 7,489 E/W W 4,865 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 460.9 Estimated	1 12 1		
Depth to water:61.0-ft Sep83 (top-of-casing)73.2-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+6: Not documented 6+45: COBBLES & BOULDERS 45+81: BOULDERS and COBBLES 31+42: SILT, SAND & COBBLES		Elevation of reference point: [462.63-(top of casing) Height of reference point above[1.7-ft ground surface Depth of surface seal Depth of surface seal: Type of surface seal: Cement grout I.D. of surface casing (12-in (Pulled back)	<u>∵</u> 1		
		I.D. of riser pipe: [8-in Type of riser pipe: Carbon steel Diameter of borehole: [9-in n	70W]		
,		Depth bottom of casing: { 45-ft Pulled back from total depth, Telescoping screen 44*81-ft.	1		
Drawing By: RKL/1#N-31.ASB Reference: HANFORD WELLS	Date:	• Depth bottom of borehole <u>[81-ft</u>	1		

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-31

WELL DESIGNATION 199-N-31

100-Aggregate Area CERCLA UNIT

1325-N RCRA FACILITY

HANFORD COORDINATES : N-Area N 7,489 W 4,865

LAMBERT COORDINATES : N ND E ND

DATE DRILLED Sep83 DEPTH DRILLED (GS) : 81.0-ft MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

73.2-ft Jul91 (top-of-casing) 8-in carbon steel, +1.7445-ft CASING DIAMETER

ELEV TOP CASING 462.63-ft ELEV GROUND SURFACE : 460.9-ft, Estimated

PERFORATED INTERVAL :

44+81-ft, telescoping, FIELD INSPECTION, 25Apr91; SCREENED INTERVAL COMMENTS Carbon steel casing.

2-ft by 2-ft round concrete pad, 4 posts, 2 removable. Capped and locked, no permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA : DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 11Sep85+30Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND

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WELL CONSTR	RUCTION AND	COMPLETION SUMMARY	
Drilling Sample Method: Cable tool Method: Hard 1 Drilling Additives Fluid Used: Not documented Used: Not doc Driller's WA State Name: Olson Lic Nr: 1217 Drilling Company: Not documented Location:Not of Started: 21Sep83 Complete: 29Sep83	documented	WELL TEMPORARY NUMBER: 199-N-32 WELL NO: Hanford N-Area Coordinates: N/S N 7,690 E/W W 4,60 State Coordinates: N Not documented E Not document Start Card #:Not documented T R S Elevation Ground surface (ft): 460,3 Estimated	
Depth to water: 60.0-ft Sep83 (Ground surface)70.2-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+13: BOULDERS and COBBLES 13+20: Not documented 20+36: BOULDERS and COBBLES 36+61: BOULDERS, COBBLES & GRAVEL 61+80: COBBLES, GRAVEL & SAND		Elevation of reference point: [462.6 (top of casing) Height of reference point above[1.8 ground surface Depth of surface seal [0+*** Type of surface seal: Cement grout, 144-gals I.D. of surface casing [12-**(Pulled back)]	·ft]
		I.D. of riser pipe: [_8-in Type of riser pipe: Carbon steel Diameter of borehole: [_9-in Not documented Elevation/depth top of seal Type of seal:Not documented Type of seal:Not d	nl
		Depth bottom of casing: [-44-Pulled back from total depth,	<u>ft</u> _1
Drawing By: RKL/1#N-32,ASB Date: Reference: HANFORD WELLS		Depth bottom of borehole [<u>80-</u>	<u>ft</u>]

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-32

199-N-32 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 1325-N

N-Area N 7,690 W 4,604 HANFORD COORDINATES : E ND

LAMBERT COORDINATES : N ND Sep83 DATE DRILLED 80.0-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) :

DEPTH TO WATER (GS) :

60.0-ft, Sep83; 70.2-ft, Jul91 8-in carbon steel, +1.8+-44-ft CASING DIAMETER

ELEV TOP CASING 464.24-ft

ELEV GROUND SURFACE : 460.3-ft Estimated NA

PERFORATED INTERVAL :

44+80-ft, telescoping, FIELD INSPECTION, 25Apr91; SCREENED INTERVAL COMMENTS

Carbon steel casing.

2-ft by 2-ft round concrete pad, 4 posts, 2 removable.

Capped and locked, no permanent identification.

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 11Sep85+31Jul91

Electric submersible PUMP TYPE

MAINTENANCE ND

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1	WELL CONSTRUCTION AND	COMPLETION SUMMARY	
Drilling Add Fluid Used: Not documented Used Driller's WA: Name: <u>Bultena</u> Lic Drilling Company: Not documented Loc Date Date	ple hod: Hard tool (nom) litives d: Not documented State Nr: 0066 pany action: Not documented	WELL TEMPORARY NUMBER: 199-N-33 WELL NO: Hanford N-Area Coordinates: N/S N 7,557 E/W W 5,101 State Coordinates: N Not documented E Not documente Start Card #:Not documented T R S Elevation Ground surface (ft): 458.3 Estimated	
Depth to water: 55.8-ft Sep83 (Ground surface)68.1-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+6: Not documented 6+44: COBBLES & BOULDERS 44+75: SAND, SILT & GRAVEL		Elevation of reference point: [459.87-(top of casing) Height of reference point above[1.6-ft ground surface Depth of surface seal Commonstrate Type of surface seal: Cement grout, 153-gals I.D. of surface casing (12-in (Pulled back))	- <u>ft</u> 1
		I.D. of riser pipe: [8-in Type of riser pipe: Carbon_steel	1 nom]
	201 201 201 201 201 201 201 201 201 201	Depth bottom of casing: [-40-ft Pulled back from total depth,	1
Drawing By:_RKL/1#N-33.ASB	# # # # # # # # # # # # # # # # # # #		:1
Reference: HANFORD WELLS			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-33

WELL DESIGNATION 199-N-33

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 1325-N

N-Area N 7,557 W 5,101 E ND

HANFORD COORDINATES : LAMBERT COORDINATES : N ND

DATE DRILLED Aug83 DEPTH DRILLED (GS) : 75.0-ft MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

55.8-ft, Sep83; 68.1-ft, Jul91 8-in carbon steel, +1.6+-40-ft CASING DIAMETER

ELEV TOP CASING 459.87-ft ELEV GROUND SURFACE : 458.3-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL

38+75-ft, telescoping, FIELD INSPECTION, 25Apr91; COMMENTS

Carbon steel casing.

2-ft by 2-ft round concrete pad,

4 posts, none removable. Capped and locked, no permanent identification.

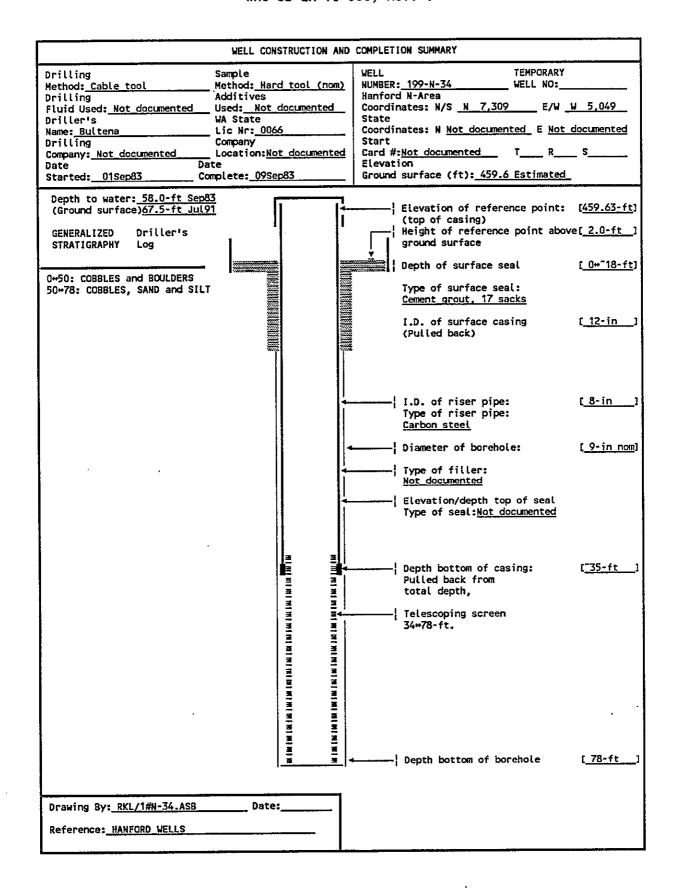
AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA **EVAL RECOMMENDATION:** NA

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LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 11Sep85+30Jul91

PUMP TYPE Hydrostar MAINTENANCE ND



SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-34

WELL DESIGNATION 199-N-34

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 7,309 W 5,049

E ND N ND

Sep83 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 78.0-ft ND

DEPTH TO WATER (GS) :

58.0-ft, Sep83; 67.5-ft, Jul91 8-in carbon steel, +2.0+~35-ft CASING DIAMETER

ELEV TOP CASING 459.63-ft

457.6-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA

SCREENED INTERVAL 34-78-ft, telescoping, COMMENTS FIELD INSPECTION, 15Aug89; Carbon steel casing.

2-ft by 2-ft round concrete pad,

4 posts, 2 removable.

Capped and locked, no permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

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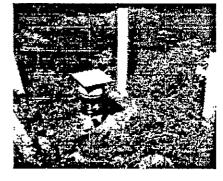
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LISTED USE RCRA monthly water level measurements;

Water levels measured 11Sep85+30Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND



WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: Keith and Doug? Lic Nr: 0066 Drilling Company: Ponderosa Location: Not documented Date Date Started: 03Apr84 Complete: 06Apr84	WELL TEMPORARY NUMBER: 199-N-35 WELL NO: Hanford N-Area Coordinates: N/S N 7,485 E/W W 4,390 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented				
Depth to water: 45.0-ft Apr84 (Ground surface) GENERALIZED Geologist's STRATIGRAPHY Log 0*15: Brown DIRT, SAND and broken GRAVELS 15*20: Brown DIRT, SAND and broken GRAVELS with more GRAVELS than above 20*25: Brown MUD, SAND with more broken GRAVEL with some broken COBBLES 50*55: Very coarse SAND and GRAVEL some broken COBBLES (Ringold?) 55*60: Broken GRAVEL and COBBLES, very coarse SAND 60*62: Very coarse SAND, broken GRAVELS and COBBLES 62*64: BOULDER	Elevation of reference point: [449_38-ft] (top of casing) Height of reference point above[ND				
Drawing By: RKL/1#N-35.ASB Date: Reference: HANFORD WELLS	← Depth bottom of borehole [<u>64-ft</u>]				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-35

WELL DESIGNATION : 199-N-35

CERCLA UNIT : 100-Aggregate Area

RCRA FACILITY : NA

HANFORD COORDINATES: N-Area N 7,485 W 4,390

LAMBERT COORDINATES : N ND E ND

DATE DRILLED : Apr84
DEPTH DRILLED (GS): 64.0-ft
MEASURED DEPTH (GS): ND

DEPTH TO WATER (GS): 45.0-ft, Apr84;

CASING DIAMETER : 6-in carbon steel, +ND+~45-ft

ELEV TOP CASING : 449.38-ft

ELEV GROUND SURFACE : Not documented

PERFORATED INTERVAL : NA

SCREENED INTERVAL : 44*64-ft, telescoping,
COMMENTS : FIELD INSPECTION, none
AVAILABLE LOGS : Geologist; driller

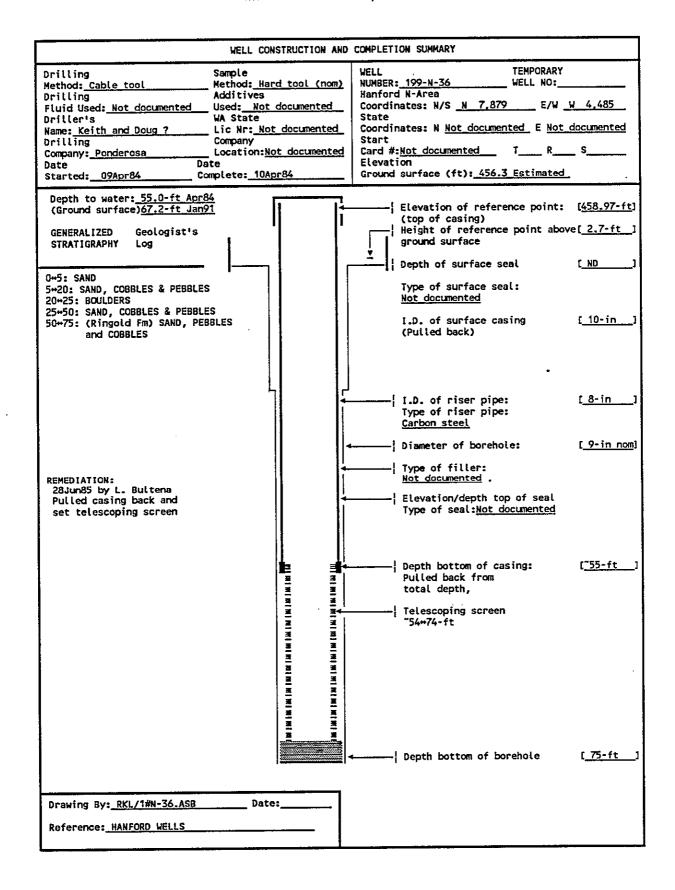
TV SCAN COMMENTS : NA
DATE EVALUATED : NA
EVAL RECOMMENDATION : NA
LISTED USE : None

PUMP TYPE : None documented

MAINTENANCE : ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-36

WELL DESIGNATION 199-N-36

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 1325-N

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 7,879 W 4,485

E ND N ND

Apr84 75.0-ft DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : ND

55.0-ft, Apr84; 67.2-ft, Jan91 8-in carbon steel, +2.74"55-ft DEPTH TO WATER (GS) :

CASING DIAMETER

ELEV TOP CASING 449.38-ft

ELEV GROUND SURFACE : 456.3-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL 54-74-ft, telescoping, COMMENTS FIELD INSPECTION, 25Apr91, Carbon steel casing.

No pad, 4 posts, capped, and locked.

No permanent identification. Driller

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 11Sep85+31Jan91

PUMP TYPE Electric submersible ND

MAINTENANCE

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WELL CONS	STRUCTION AND	COMPLETION SUMMARY	
Drilling Sample Method: Cable tool Method: Hard Drilling Additives Fluid Used: Not documented Used: Not of Driller's WA State Name: Keith and Doug ? Lic Nr: Not Company Company: Ponderosa Company Date Started: 10Apr84 Complete: 11App	documented documented t documented	Hanford N-Area Coordinates: N/S N 8,138 E/W W 4 State Coordinates: N Not documented E Not docu Start	mented
Depth to water: 55.0-ft Apr84 (Ground surface)63.6-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log O+10: Fine SAND, some broken ROCK, a few BOULDERS and COBBLES 10+15: Fine brown SAND, broken PEBBLES and COBBLES 15+25: Broken PEBBLES and COBBLES, some SAND 25+30: Broken PEBBLES and COBBLES,		Type of surface seal: Not documented	
coarse SAND 30*35: SAND, some PEBBLES and broken COBBLES 35*40: SAND and PEBBLES, some broken PEBBLES 40*55: Broken COBBLES and PEBBLES, SAND 55*65: Broken PEBBLES and COBBLES, some SAND 65*70: Broken COBBLES and PEBBLES, very little coarse SAND 70*75: Broken COBBLES and PEBBLES, some coarse SAND 75: Broken COBBLES, PEBBLES and coarse SAND		Type of riser pipe: Carbon steel	8-in] 9-in nom]
REMEDIATION: 26+27Jun85 by L. Bultena Pulled back casing and set telescoping screen		Pulled back from total depth, Telescoping screen	55-ft]
Drawing By: RKL/1#N-37.ASB Date Reference: HANFORD WELLS		Depth bottom of borehole [_	<u>75-ft</u>]

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-37

199-N-37 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N-Area N 8,138 W 4,571 HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E ND

Apr84 DATE DRILLED DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): 75.0-ft

55.0-ft, Apr84; 8-in carbon steel, +3.0+"55-ft CASING DIAMETER

456.12-ft ELEV TOP CASING

453.1-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA

54+74-ft, telescoping, FIELD INSPECTION, 15Aug89; SCREENED INTERVAL COMMENTS Carbon steel casing. 18-in square pad, 4 posts,

capped, locked.

No permanent identification.

AVAILABLE LOGS Geologist TV SCAN COMMENTS NA

DATE EVALUATED NA EVAL RECOMMENDATION : NA

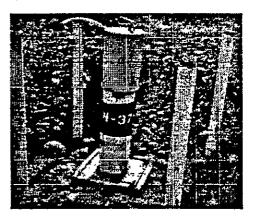
RCRA monthly water level measurements; LISTED USE

Water levels measured 11Sep85+31Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND

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WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Method: Cable tool Prilling Fluid Used: Not documented Driller's Keith and Doug? Company: Ponderosa Date Started: 11Apr84 Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location:Not documented Date Complete: 12Apr84	WELL TEMPORARY NUMBER: 199-N-38 WELL NO: Hanford N-Area Coordinates: N/S N 8,071 E/W W 4,142 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 456.3 Estimated
Depth to water:55-ft Apr84 (Ground surface) GENERALIZED Geologist's STRATIGRAPHY Log 0**10: Fine brown SAND, broken BASALT chips 10**15: Fine brown SAND, broken COBBLES and RCCK, BOULDERS 15**20: Broken ROCKS and COBBLES, BOULDERS, fine-medium SAND 20**25: Broken ROCK & PEBBLES, BOULDERS, quite a bit of very fine to some medium SAND 25**30: Fine to coarse SAND, PEBBLES and a few broken COBBLES 30**40: Medium-very coarse SAND, GRANULES, PEBBLES and broken COBBLES 40**45: Broken COBBLES, PEBBLES, some fine SAND 45**55: Broken COBBLES, PEBBLES, some fine SAND 45**55: Broken COBBLES, pEBBLES, some fine SAND 45**55: Broken COBBLES, ond a few broken COBBLES 60**65: SAND, FEBBLES, and a few broken COBBLES 65**70: Broken COBBLES and PEBBLES and a LITTLE sand 70**75: Broken PEBBLES, COBBLES, very little coarse SAND 75: SAND, broken COBBLES & PEBBLES ABANDONMENT: 05**07Jun85 by L. Bultena Pulled 8-in casing and filled hole with cement and 5% bentonite grout	Elevation of reference point: [456.40-ft] (top of casing before removal) Height of reference point above[ND] ground surface Depth of surface seal
Drawing By: RKL/1#N-38.ASB Date: Reference: HANFORD WELLS	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-38

199-N-38 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 8,071 W 4,142

N ND E ND

Apr84 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 75.0-ft

ND DEPTH TO WATER (GS) : 55-ft, Apr84

CASING DIAMETER ELEV TOP CASING 8-in carbon steel, pulled 456.40-ft (Before removal)

ELEV GROUND SURFACE : ND NA

PERFORATED INTERVAL : SCREENED INTERVAL :

None documented FIELD INSPECTION, none COMMENTS

AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : NA LISTED USE None PUMP TYPE None MAINTENANCE ND

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Keith and Doug? Company: Ponderosa Date Started: 18Apr84 Method: Hard to Method: Hard to Method: Hard to Method: Hard to Method: Hard to Method: Not documented Location: Not documented Method: Hard to Method: Hard to Method: Not documented Location: Not documented Method: Hard to Method: Hard to Method: Not documented Location: Not documented Method: Hard to Method: Hard to Method: Not documented Location: Not documented Method: Hard to Method: Hard to Method: Hard to Method: Not documented Location: Not documented Date Complete: 18Apr84	ocumented documented	Hanford Coordin State Coordin Start Card #: Elevati	·	0:
Depth to water: 58.0-ft Apr84 (Ground surface)62.8-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log 0+10: Fine to very fine brown SAND 10+20: Medium to very fine brown SAND, PEBBLES, broken GRAVEL BOULDERS 20+25: Very coarse to very fine SAND, broken GRAVEL (BOULDERS), few PEBBLES 25+30: Very coarse to medium SAND, broken GRAVEL and PEBBLES 30+35: Very coarse to fine SAND, PEBBLES, broken GRAVEL and COBBLES 35+40: Very coarse to fine SAND, broken GRAVEL (BOULDERS), COBBLES and a few PEBBLES 40+45: Coarse to very fine brown SAND, broken COBBLES, GRAVEL and PEBBLES, broken GRAVEL and COBBLES (Ringold) 55+60: Coarse to medium SAND, PEBBLES, broken GRAVEL, some COBBLES 65+80: Very coarse to fine SAND, PEBBLES, broken GRAVEL and COBBLES REMEDIATION: 17Jun85 by L. Bultena Pulled back casing and set telescoping screen			Elevation of reference point (top of casing) Height of reference point (ground surface) Depth of surface seal: Type of surface seal: Not documented I.D. of surface casing (Pulled back) I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole: Type of filler: Not documented Elevation/depth top of seal: Type of seal:Not documented Depth bottom of casing: Pulled back from total depth, Telescoping screen -53*73-ft	above[<u>2.25-ft</u>] [<u>ND</u>] [_10-in] [_8-in] [_9-in_nom]
Drawing By: RKL/1#N-39.ASB Date:				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-39

199-N-39 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 1325-N

HANFORD COORDINATES : N-Area N 8,388 W 4,432

E ND LAMBERT COORDINATES : N ND

Apr84 780-ft DATE DRILLED DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

58.0-ft, Apr84; 62.8-ft, Jul91 8-in carbon steel, +2.25+~55-ft CASING DIAMETER

454.31-ft

ELEV TOP CASING : ELEV GROUND SURFACE : 452.1-ft Estimated

PERFORATED INTERVAL : SCREENED INTERVAL

53+73-ft, telescoping, FIELD INSPECTION, 25Apr91, COMMENTS

Carbon steel casing.

2-ft square pad, 4 posts, capped, and locked. No permanent identification.

AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA : DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 13Sep85+31Jul91

Electric submersible PUMP TYPE

MAINTENANCE

WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Keith and Doug? Lic Nr: Not documented Drilling Company Company: Ponderosa Location: Not documented Date Started: 17Apr84 Complete: 17Apr84	WELL TEMPORARY NUMBER: 199-N-40 WELL NO: Hanford N-Area Coordinates: N/S N 8,585 E/W W 4,276 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 454,4 Estimated
Depth to water: 58,0-ft Apr84 (Ground surface)65,4-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log	Elevation of reference point: [456.35-ft] (top of casing) Height of reference point above[2.0-ft] ground surface
0+10: Broken GRAVEL and COBBLES some fine to medium SAND 10+15: Broken COBBLES and GRAVEL, some very fine+medium SAND 15+20: Broken GRAVEL and COBBLES, very fine to medium SAND 20+25: Broken PEBBLES, COBBLES and very fine to medium SAND 25+30: Broken GRAVEL, PEBBLES, coarse to fine SAND and a few	Type of surface seal: Not documented I.D. of surface casing [_10-in] (Pulled back)
broken COBBLES 30+35: Very coarse to medium SAND, PEBBLES, a few broken COBBLES and GRAVELS 35+40: Very coarse to medium SAND, broken PEBBLES and COBBLES	1.D. of riser pipe: [8-in] Type of riser pipe: Carbon steel Diameter of borehole: [9-in nom]
40+45: Very coarse to medium SAND GRAVEL and some broken COBBLES 45+50: Broken COBBLES and GRAVEL, PEBBLES and some coarse to fine SAND (Ringold) 50+55: Broken COBBLES, GRAVEL and PEBBLES, very coarse to medium SAND 55+60: Broken COBBLES, GRAVEL and	Type of filler: Not documented Elevation/depth top of seal Type of seal:Not documented
PEBBLES, very coarse to very fine SAND 60*65: Very coarse to medium SAND, some broken GRAVEL and PEBBLES, very few COBBLES 65*70: Very coarse to medium SAND, PEBBLES, few broken COBBLES 70*75: Broken GRAVEL, very coarse to fine SAND, PEBBLES, broken COBBLES 75*80: Broken COBBLES and GRAVEL,	Depth bottom of casing: [<u>-55-ft</u>] Pulled back from total depth, Telescoping screen -53*73-ft
70+75: Broken GRAVEL, very coarse to fine SAND, PEBBLES, broken COBBLES 75+80: Broken COBBLES and GRAVEL, PEBBLES and very coarse to fine SAND 80: Broken COBBLES, PEBBLES and GRAVEL, very coarse to medium SAND REMEDIATION: 14Jun85 by L. Bultena Putled back casing and set telescoping screen	← Pepth bottom of borehole [<u>~80-ft</u>]
Drawing By: RKL/1#N-40.ASB Date: Reference: HANFORD WELLS	

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-40

199-N-40 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 8,585 W 4,276

H ND E ND

Apr84 "80-ft DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

58.0-ft, Apr84; 65.4-ft, Jul91 8-in carbon steel, +2.0+-55-ft CASING DIAMETER

ELEV TOP CASING 456.35-ft 454.4-ft Estimated

ELEV GROUND SURFACE : PERFORATED INTERVAL :

SCREENED INTERVAL

53+73-ft, telescoping, FIELD INSPECTION, 15Aug89, COMMENTS Carbon steel casing.

2-ft square pad, 4 posts, capped, and locked. No permanent identification.

AVAILABLE LOGS Geologist

NA TV SCAN COMMENTS DATE EVALUATED NA EVAL RECOMMENDATION :

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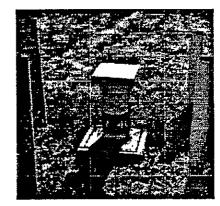
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LISTED USE RCRA monthly water level measurements;

Water levels measured 11Sep85+31Jul91

PUMP TYPE None MAINTENANCE ND



WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: Keith and Doug ? Lic Nr: Not documented Drilling Company Company: Ponderosa Location: Not documented Date Started: 19Apr84 Complete: 19Apr84	WELL TEMPORARY NUMBER: 199-N-41 WELL NO: Hanford N-Area Coordinates: N/S N 8,816 E/W W 4,100 State Coordinates: N Not documented E Not documented Start. Card #:Not documented T R S Elevation Ground surface (ft): 455,0 Estimated
Depth to water: 58.0-ft Apr84 (Ground surface)67.0-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log	Elevation of reference point: [457.59-ft] (top of casing) Height of reference point above[2.6-ft] ground surface Depth of surface seal [ND]
0+25: SAND, COBBLES, GRAVEL & PEBBLES 25+30: SAND, GRAVEL & COBBLES 30+65: SAND, GRAVEL, COBBLES & PEBBLES (Ringold at 45-ft) 65+70: SAND, PEBBLES & GRAVEL 70+75: SAND, COBBLES & PEBBLES 75+78: SAND, COBBLES, GRAVEL & PEBBLES	Type of surface seal: Not documented I.D. of surface casing [<u>10-in</u>] (Pulled back)
	I.D. of riser pipe: [8-in] Type of riser pipe: Carbon steel P-in nom Type of filler: Not documented Elevation/depth top of seal
REMEDIATION: 1244Jun85 by L. Bultena Pulled back casing and set telescoping screen	Type of seal: Not documented Depth bottom of casing: [_55-ft_] Pulled back from total depth, Telescoping screen53*73-ft
Drawing By: RKL/1#N-41_ASB Date:	Depth bottom of borehole [<u>"78-ft</u>]
Reference: HANFORD WELLS	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-41

199-N-41 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 1325-N

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 8,816 W 4,100

N ND E ND

Apr84 ~78-ft DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

78.0-ft, Apr84; 67.0-ft, Jul91 8-in carbon steel, +2.6+-55-ft CASING DIAMETER

ELEV TOP CASING : ELEV GROUND SURFACE : 457.59-ft 455.0-ft Estimated

PERFORATED INTERVAL :

SCREENED INTERVAL

53+73-ft, telescoping, FIELD INSPECTION, 25Apr91, COMMENTS

Carbon steel casing. 2-ft square pad, 4 posts, capped, and locked.

No permanent identification. Driller

AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 11Sep85+31Ju191

PUMP TYPE Electric submersible

MAINTENANCE

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Fluid Used: Not documented Driller's Name: Not documented Drilling Company: Not documented Date Additives Used: Not WA State Lic Nr: Not Company Location:No	documented	Hanford Coordin State Coordin Start Card #: Elevati	199-N-42 I N-Area Nates: N/S N 8,746 Nates: N Not document Not documented on	ed E <u>Not c</u>	documented
Started: 24Apr84 Complete: 24Apr	г84	Ground	surface (ft): 452,1	Estimated	
Depth to water: 58.0-ft Apr84 (Ground surface)63.7-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log 0+5: SAND, COBBLES & GRAVEL 5+30: GRAVEL, PEBBLES, COBBLES & SAND 30+35: SAND, GRAVEL & PEBBLES 35+75: GRAVEL, PEBBLES, SAND & COBBLES (Ringold at 45-ft) 75+78: GRAVEL, PEBBLES & SAND			Elevation of referen (top of casing) Height of reference ground surface Depth of surface sea Type of surface seal Not documented I.D. of surface casi (Pulled back)	point above	
	4		I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole Type of filler: Not documented Elevation/depth top Type of seal:Not doc	of seal	[<u>8-in</u> _] [<u>9-in_nom</u>]
REMEDIATION: 02Jul85 by L. Bultena Pulled back casing and set telescoping screen	10 1 10 1 10 1 10 1 10 1 10 1 10 1 10	•	Depth bottom of casi Pulled back from total depth, Telescoping screen Depth not documented	-	(<u>~55-ft</u> _1
Drawing By: RKL/1#N-42.ASB Date: Reference: HANFORD WELLS	MAI DAI DAI DAI DAI DAI DAI DAI DAI DAI D		Depth bottom of bore	thole	[-78-ft]

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-42

199-N-42 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

1325-N RCRA FACILITY

N-Area N 8,746 W 3,774 HANFORD COORDINATES : END

LAMBERT COORDINATES : N ND Apr84 ~78-ft DATE DRILLED

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) :

58.0-ft, Apr84; 63.7-ft, Jul91 DEPTH TO WATER (GS) :

8-in carbon steel, +3.0+"55-ft CASING DIAMETER

455.14-ft ELEV TOP CASING 452.1-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA

SCREENED INTERVAL None documented

FIELD INSPECTION, 19Sep89, COMMENTS

Carbon steel casing.

2-ft square pad, 4 posts, capped, and locked. No permanent identification.

Geologist AVAILABLE LOGS

TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; dropped from monitoring network after Feb90 sampling; Water levels measured 11Sep85+31Jul91 LISTED USE

Electric submersible PUMP TYPE

MAINTENANCE ND

WELL CON	STRUCTION AND	COMPLETI	ION SUMMARY	
Drilling Fluid Used: Not documented Driller's Name: Not documented Drilling Company: Not documented Date Started: 20Apr84 Additives Used: Not Used: Not Coset: Not Company Company Location:No Date Complete: 24Ap	documented	Hanford Coordin State Coordin Start Card #: Elevat		0:
Depth to water:58.0-ft Apr84 (top-of-casing)61.8-ft Nov85 GENERALIZED Geologist's STRATIGRAPHY Log 0+10: Medium+very fine SAND, PEBBLES, some broken COBBLES 10+15: Broken COBBLES and PEBBLES, some very fine SAND 15+20: Broken COBBLES, GRAVEL and PEBBLES, some medium+fine SAND 20+25: Coarse+fine SAND, broken GRAVELS, COBBLES and PEBBLES 25+30: Coarse+very fine SAND, broken GRAVELS, some COBBLES & PEBBLES 30+40: Very coarse+very fine SAND, broken GRAVELS and PEBBLES, some COBBLES 40+45: Very coarse+fine SAND, broken PEBBLES, GRAVELS & COBBLES 45+55: Broken COBBLES, PEBBLES, GRAVEL & very coarse+medium SAND (Ringold) 55+70: Broken COBBLES, PEBBLES, GRAVEL & coarse+very fine SAND 70+75: Broken COBBLES, PEBBLES, GRAVEL & some coarse+fine SAND 75+80: Broken GRAVEL, COBBLES, PEBBLES, very little medium+fine SAND 80: Broken GRAVEL, COBBLES, PEBBLES & medium SAND REMEDIATION: 12Jun85 by L. Bultena Pulled back casing and set telescopinmg screen			Elevation of reference point (top of casing) Height of reference point ground surface Depth of surface seal: Not documented I.D. of surface casing (Pulled back) I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole: Type of filler: Not documented Elevation/depth top of sea Type of seal:Not document. Depth bottom of casing: Pulled back from total depth, Telescoping screen 51*71-ft	above [_ND] [_ND] [_10-in] (8-in] (9-in_nom]
Drawing By: RKL/1#N-43.ASB Date		4	Depth bottom of borehole	(<u>~80-ft</u>)
Reference: HANFORD WELLS				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-43

WELL DESIGNATION 199-N-43

100-Aggregate Area CERCLA UNIT

RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 9,579 W 3,766

E ND N ND

Apr84 ~80-ft DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) :

58.0-ft, Apr84; 61.8-ft, Nov85 (top-of-casing) 8-in carbon steel, ND+"55-ft CASING DIAMETER

ELEV TOP CASING 449.01-ft

ELEV GROUND SURFACE : ND PERFORATED INTERVAL : NA

SCREENED INTERVAL : 51+71-ft telescoping FIELD INSPECTION, none COMMENTS

AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Water levels measured 17Sep85+21Nov85 LISTED USE

PUMP TYPE None documented

MAINTENANCE ND

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: Keith and Doug Lic Nr: Not documented Drilling Company Company: Ponderosa Location: Not documented Date Date Started: 13Apr84 Complete: 16Apr84	WELL TEMPORARY NUMBER: 199-N-44 WELL NO: Hanford N-Area Coordinates: N/S N 8,329 E/W W 3,901 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 457.9 Estimated			
O+10: Fine SAND, some broken COBBLES and PEBBLES 10+15: Broken COBBLES and PEBBLES: BOULDERS, some coarse+fine SAND 15+30: Very coarse+medium SAND, PEBBLES and broken COBBLES 30+35: Very coarse+medium SAND, some PEBBLES & a few broken COBBLES 35+40: Very coarse+medium SAND, very few PEBBLES and broken COBBLES 40+45: Very coarse+medium SAND, broken COBBLES, few PEBBLES 45+50: Coarse+fine SAND, PEBBLES and broken COBBLES (Ringold) 50+55: Coarse+medium SAND, broken COBBLES and PEBBLES 55+60: Medium+fine SAND, broken COBBLES and PEBBLES 60+65: Coarse+very fine SAND, broken COBBLES and PEBBLES 65+70: Very coarse+very fine SAND, broken PEBBLES and COBBLES	Elevation of reference point: [460.70-ft] (top of casing) Height of reference point above[2.8-ft] ground surface Depth of surface seal			
70+75: Very coarse+fine SAND, some broken PEBBLES 75+80: Very coarse+fine SAND, broken PEBBLES, a few COBBLES 80+85: Broken COBBLES, PEBBLES, very coarse+very fine SAND 85: PEBBLES, broken COBBLES, coarse+fine SAND	No documentation of telescoping screen, casing pullback or perforations Depth bottom of borehole (<u>*85-ft</u>)			
Reference: HANFORD WELLS				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-44

WELL DESIGNATION 199-N-44

CERCLA UNIT 100-Aggregate Area :

RCRA FACILITY NA

HANFORD COORDINATES : N-Area N 8,746 W 3,774

N ND LAMBERT COORDINATES : END

Арг84 DATE DRILLED DEPTH DRILLED (GS) : ~85-ft MEASURED DEPTH (GS) : ND

62.0-ft, Apr84; DEPTH TO WATER (GS) :

68.8-ft, Jul91 8-in carbon steel, +2.8+~83-ft CASING DIAMETER

460.70-ft 457.9-ft Estimated ELEV TOP CASING ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA

SCREENED INTERVAL None documented

COMMENTS FIELD INSPECTION, 19Sep89, Carbon steel casing. 18-in square pad, 4 posts,

capped, and locked.

No permanent identification. Geologist

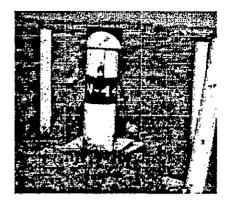
AVAILABLE LOGS TV SCAN COMMENTS NA

DATE EVALUATED NA **EVAL RECOMMENDATION:** NA

LISTED USE RCRA monthly water level measurements; Water levels measured 11Sep85+31Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND



WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Not documented Drilling Company: Not documented Date Started: 25Apr84 Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company: Not documented Date Started: 25Apr84 Complete: 25Apr84		WELL TEMPORARY NUMBER: 199-N-45 WELL NO: Hanford N-Area Coordinates: N/S N 7,474 E/W W 4,273 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented		
Depth to water:53,0-ft Apr84 (top-of-casing)50.6-ft Nov85 GENERALIZED Geologist's STRATIGRAPHY Log 0+10: Medium+very fine SAND, PEBBLES and broken GRAVEL 10+15: Very coarse+very fine SAND, PEBBLES and broken GRAVEL 15+25: Very coarse+very fine SAND, broken COBBLES, GRAVEL & PEBBLES 25+30: Very coarse+medium SAND, broken GRAVEL, COBBLES and PEBBLES 30+35: Coarse+very fine SAND, broken GRAVEL and PEBBLES, few COBBLES 35+40: Very coarse+very fine SAND, broken GRAVEL and PEBBLES, few COBBLES 40+45: Broken COBBLES and GRAVEL, PEBBLES, very coarse+very fine SAND 50+55: Very coarse+very fine SAND broken GRAVEL and PEBBLES 55+60: Broken GRAVEL, COBBLES & PEBBLES, some very fine SAND (Ringold) 60+65: Very coarse+very fine SAND, broken GRAVEL and PEBBLES 65+70: Broken GRAVEL, COBBLES, PEBBLES coarse+very fine SAND 70+73: Very coarse+very fine SAND, broken GRAVEL, PEBBLES 73: Broken GRAVEL, PEBBLES, very coarse+very fine SAND REMEDIATION: 07+11Jun85 by L. Bultena Pulled back casing and set telescoping screen		Elevation of reference positions of casing) Height of reference point ground surface Depth of surface seal: Not documented I.D. of surface casing (Pulled back) I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole: Type of filter: Not documented Elevation/depth top of seal:Not document Depth bottom of casing: Pulled back from total depth, Telescoping screen 51+71-ft	[ND] [ND] [10-in _] [8-in] [9-in nom]	
Drawing By: RKL/1#N-45.ASB Date: Reference: HANFORD WELLS		•¦ Depth bottom of borehole	[<u>"73-ft</u>]	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-45

199-N-45 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

N-Area N 7,474 W 4,273 N ND E ND HANFORD COORDINATES :

LAMBERT COORDINATES :

DATE DRILLED Apr84 73-ft DEPTH DRILLED (GS): MEASURED DEPTH (GS): ND

DEPTH TO WATER (GS) :

53.0-ft, Apr84; 50.6-ft, Nov85 (top-of-casing) 8-in_carbon_steel, ND+"53-ft CASING DIAMETER

ELEV TOP CASING 452.31-ft

ELEV GROUND SURFACE : ND PERFORATED INTERVAL :

51+71-ft telescoping SCREENED INTERVAL FIELD INSPECTION, COMMENTS

Geologist AVAILABLE LOGS

TV SCAN COMMENTS DATE EVALUATED EVAL RECOMMENDATION :

Water levels measured 11Sep85+21Nov85 LISTED USE

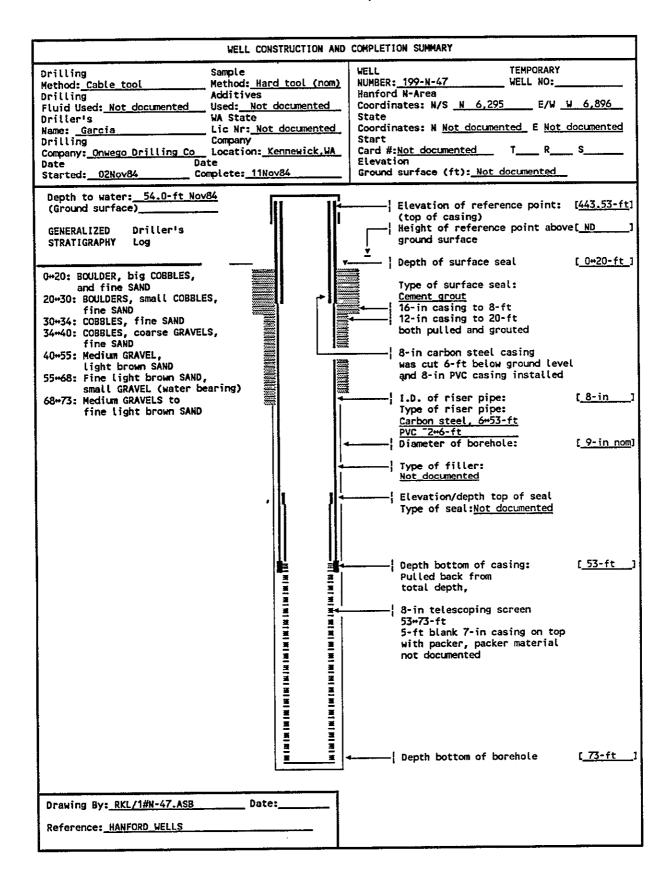
Electric submersible PUMP TYPE

MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-47

WELL DESIGNATION 199-H-47

CERCLA UNIT

100-Aggregate Area 1301-N, 1324-N/NA Assessment N-Area N 6,295 W 6,896 RCRA FACILITY HANFORD COORDINATES : LAMBERT COORDINATES :

E ND N ND

Nov84 DATE DRILLED DEPTH DRILLED (GS) : 73-ft

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

54.0-ft, Apr84;

8-in carbon steel, 6+53-ft 8-in PVC, "2+6-ft 443.53-ft CASING DIAMETER

ELEV TOP CASING ELEV GROUND SURFACE : ND

PERFORATED INTERVAL : SCREENED INTERVAL : NA

53+73-ft 8-in telescoping FIELD INSPECTION, 28Sep89, COMMENTS

PVC casing.

No pad, no posts, capped, not locked. No permanent identification. Inside double security fence.

No access.

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA quarterly sampling; LISTED USE

Electric submersible, set at 68-ft below ground level PUMP TYPE

MAINTENANCE

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WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: J. Bultena Lic Nr: Not documented Drilling Company: Onwego Drilling Co Date Date Started: 02Nov84 Complete: 08Nov84 Depth to water: Not documented (Ground surface)	WELL TEMPORARY NUMBER: 199-N-48 WELL NO: Hanford N-Area Coordinates: N/S N 6,220 E/W W 6,916 State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented Elevation of reference point: [439.79-ft] (top of casing)
GENERALIZED Driller's STRATIGRAPHY Log 0+15: GRAVELS, COBBLES and BOULDERS 15+20: Tan Sand, GRAVELS, black SAND & large COBBLES 20+25: GRAVELS, black SAND & COBBLES BOULDER at 18+19-ft 25+35: GRAVELS and COBBLES 35+40: GRAVELS, COBBLES & large COBBLES	Height of reference point above[ND] ground surface Depth of surface seal [_0+20-ft_] Type of surface seal: Cement grout 16-in casing to 8-ft 12-in casing to 20-ft both pulled and grouted 8-in carbon steel casing was cut
35+40: GRAVELS, COBBLES & Large COBBLES 40+50: GRAVELS & COBBLES 50+65: SAND (tan) GRAVELS & COBBLES 65+71: SAND (tan) & GRAVELS 68+73: Medium GRAVELS to fine light brown SAND	below ground level and 8-in PVC installed I.D. of riser pipe: Type of riser pipe: Carbon steel, 6*53-ft PVC -2*6-ft Diameter of borehole: Type of filler: Not documented Elevation/depth top of seal Type of seal:Not documented
	Depth bottom of casing: [51-ft] Pulled back from total depth, 8-in telescoping screen 51+71-ft, #20-slot 5-ft blank 7-in casing on top with packer, packer material not documented
Drawing By: RKL/1#N-48,ASB Date:Reference: HANFORD WELLS	• —— Depth bottom of borehole [<u>73-ft</u>

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-48

WELL DESIGNATION 199-N-48

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

N-Area N 6,220 W 6,916 N ND E ND HANFORD COORDINATES :

LAMBERT COORDINATES : N ND

Nov84 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 71-ft ND DEPTH TO WATER (GS) : ND

CASING DIAMETER 8-in carbon steel, ND+51-ft

8-in PVC, ND

439.79-ft ELEV TOP CASING ELEV GROUND SURFACE : ND

PERFORATED INTERVAL : NA

SCREENED INTERVAL 51+71-ft 8-in telescoping COMMENTS FIELD INSPECTION, none

Driller AVAILABLE LOGS TV SCAN COMMENTS НA DATE EVALUATED NA NA

EVAL RECOMMENDATION : LISTED USE None

Electric submersible, PUMP TYPE

MAINTENANCE

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WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Used: Not documented Used: Not documented Driller's WA State Name: L. Bultena Lic Nr: Not documented Drilling Company Company: Not documented Date Date Started: 03Jul85 Complete: 15Jul85	WELL TEMPORARY NUMBER: 199-N-49 WELL NO: Well #3 Hanford N-Area Coordinates: N/S N ND E/W W ND State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented
Depth to water: Not documented (top-of-casing) 62.4-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+10: Not documented 10+20: BOULDERS, COBBLES, SAND 20+29: COBBLES & SAND 29+61: Compacted SILT, SAND & COBBLES 61+65: Not documented	Elevation of reference point: [450.72-ft] (top of casing) Height of reference point above[ND] ground surface Depth of surface seal [_0+20-ft] Type of surface seal: Cement grout
# 1 # 1 # 1 # 1 # 1 # 1 # 1 # 1 # 1 # 1	Type of filler: Not documented Elevation/depth top of seal Type of seal:Not documented Type of seal:Not documented Depth bottom of casing: [-61-ft7] Not well documented
Drawing By: RKL/1#N-49.ASB Date: Reference: HANFORD WELLS	55+65-ft Depth bottom of borehole [<u>65-ft</u>]

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-49

199-N-49 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

₩ ND ° HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N ND

E ND N ND

DATE DRILLED Jul85 DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): 65-ft ND

8-in carbon steel, ND+~61-ft CASING DIAMETER

450.72-ft ELEV TOP CASING

ELEV GROUND SURFACE : ND PERFORATED INTERVAL : NA

55+65-ft 8-in telescoping FIELD INSPECTION, none SCREENED INTERVAL COMMENTS

Driller AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED EVAL RECOMMENDATION : NA

RCRA monthly water level measurements; Water levels measured 11Sep85+30Jul91 LISTED USE

PUMP TYPE Electric submersible,

MAINTENANCE

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Sample Method: Cable tool Method: Hard tool (nom) Drilling Additives Fluid Used: Not documented Used: Not documented Driller's WA State Name: K. Olson Lic Nr: Not documented Drilling Company Company: Not documented Date Date Started: 17Jul85 Complete: 31Jul85	WELL TEMPORARY NUMBER: 199-N-50 WELL NO: Well #4 Hanford N-Area Coordinates: N/S N ND E/W W ND State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): Not documented			
Depth to water:76.0-ft Jul85 (top-of-casing)76.8-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+5: Not documented 5+8: BOULDERS and COBBLES 8+14: COBBLES, BOULDERS and GRAVEL 14+20: COBBLES and GRAVEL 20+22: COBBLES and GRAVEL with SAND 22+26: BOULDERS, COBBLES, GRAVEL and SAND 26+31: BOULDERS, COBBLES and GRAVEL 31+50: GRAVEL, COBBLES and GRAVEL 550-60: GRAVEL, Small COBBLES and SAND 60+70: GRAVEL, small COBBLES and SAND	Elevation of reference point: [453.36-ft] (top of casing) Height of reference point above[ND] ground surface Depth of surface seal [0+20-ft]			
partially cemented 70+86: Not documented	I.D. of riser pipe: [8-in] Type of riser pipe: Carbon steel, ND+**66-ft Diameter of borehole: [9-in nom] Type of filler: Not documented Elevation/depth top of seal Type of seal:Not documented			
	Depth bottom of casing: [~66-ft] Pulled back to expose screen 8-in telescoping screen 66-86-ft			
,	Depth bottom of borehole [<u>86-ft</u>]			
Drawing By: RKL/1#N-50.ASB Date: Reference: HANFORD WELLS				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-50

WELL DESIGNATION : 199-N-50

CERCLA UNIT : 100-Aggregate Area

RCRA FACILITY : NA

HANFORD COORDINATES: N-Area N ND W ND LAMBERT COORDINATES: N ND E ND

DATE DRILLED : Jul85
DEPTH DRILLED (GS) : 86-ft

MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) : 76.0-ft Jul85;

76.8-ft, Jul91 (top-of-casing)
CASING DIAMETER : 8-in carbon steel, ND+66-ft

ELEV TOP CASING : 453.36-ft ELEV GROUND SURFACE : ND PERFORATED INTERVAL : NA

SCREENED INTERVAL : 66-86-ft 8-in telescoping COMMENTS : FIELD INSPECTION, none

AVAILABLE LOGS : Driller
TV SCAN COMMENTS : NA
DATE EVALUATED : NA
EVAL RECOMMENDATION : NA

EVAL RECOMMENDATION: NA
LISTED USE: RCRA monthly water level measurements;
Water levels measured 11Sep85+30Jul91

PUMP TYPE : Electric submersible,

MAINTENANCE : ND

WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Sample Method: Cable tool Method: Hard tool (r Drilling Additives Fluid Used: Not documented Used: Not documente Driller's WA State	Hanford N-Area			
Name: K. Olson Lic Nr: Not document Drilling Company Company: Not documented Location: Not document Date Date	Start			
Depth to water: 75.0-ft Jul85 (top-of-casing) 76.4-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+10: Not documented 10+20: GRAVEL, small COBBLES and SAND 20+35: COBBLES, GRAVEL and SAND 35+53: GRAVELS and SAND, partially cemented 70+86: SAND and GRAVEL	Elevation of reference point: [462.18-ft] (top of casing) Height of reference point above[ND] ground surface Depth of surface seal [-0+20-ft]			
Drawing By: RKL/1#N-51,ASB Date:				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-51

199-N-51 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

HANFORD COORDINATES : .LAMBERT COORDINATES : N-Area N ND

E ND N ND

DATE DRILLED Jul85 86-ft DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : ND

75.0-ft Jul85;

76.4-ft, Jul91 (top-of-casing) 8-in carbon steel, ND+67-ft CASING DIAMETER

ELEV TOP CASING 462.18-ft

ELEV GROUND SURFACE : ND PERFORATED INTERVAL : NA

SCREENED INTERVAL 66+86-ft 8-in telescoping FIELD INSPECTION, none COMMENTS

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements;

Water levels measured 11Sep85+30Jul91 Electric submersible, PUMP TYPE

MAINTENANCE ND

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WELL CONSTRUCTION AND COMPLETION SUMMARY			
Drilling Additives Fluid Used: Not documented Used: Not Driller's WA State Name: K, Olson Lic Nr: No Drilling Company	and tool (nom) documented ot documented lot documented	WELL TEMPORARY NUMBER: 199-N-52 WELL NO: Well #1 Hanford N-Area Coordinates: N/S N ND E/W W ND State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 461.7 Estimated	
Depth to water: 65.0-ft Jul85 (Ground surface)71.2-ft Jul91 GENERALIZED Driller's STRATIGRAPHY Log 0+7.5: Not documented		Elevation of reference point: [463,70-ft (top of casing) Height of reference point above[2.0-ft ground surface Depth of surface seal [0+20-ft]	
Drawing By: RKL/1#N-52.ASB Dat Reference: HANFORD WELLS	:e:		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-52

WELL DESIGNATION : 199-N-52

CERCLA UNIT : 100-Aggregate Area

RCRA FACILITY : 1325-N

HANFORD COORDINATES: N-Area N ND W NI LAMBERT COORDINATES: N ND E ND

LAMBERT COORDINATES: N ND
DATE DRILLED : Jul85
DEPTH DRILLED (GS): 76-ft

DEPTH DRILLED (GS): 76-fs
MEASURED DEPTH (GS): ND

DEPTH TO WATER (GS): 65.0-ft, Jul85; 71.2-ft, Jul91
CASING DIAMETER: 8-in carbon steel, ND+56.5-ft

ELEV TOP CASING : 463.70-ft
ELEV GROUND SURFACE : 461.7-ft Estimated

PERFORATED INTERVAL: NA

SCREENED INTERVAL : 56+76-ft 8-in telescoping COMMENTS : FIELD INSPECTION, 15Aug89,

Carbon steel casing. 2-ft round pad, 4 posts, capped, and locked. No permanent identification.

AVAILABLE LOGS : Driller TV SCAN COMMENTS : NA DATE EVALUATED : NA EVAL RECOMMENDATION : NA

LISTED USE : RCRA monthly water level measurements, quarterly sampling; dropped from RCRA

monitoring network after Feb90 sampling. Water levels measured 11Sep85+31Jul91

PUMP TYPE : Electric submersible,

MAINTENANCE : NO

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WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Method: Cable tool Drilling Fluid Used: Not documented Driller's Name: L. Bultena Drilling Company: Not documented Date Started: 18Jun85 Sample Method: Hard tool (nom) Additives Used: Not documented Used: Not documented Used: Not documented Used: Not documented Used: Not documented Date Company Location: Not documented Date Complete: 17Jul85	WELL TEMPORARY NUMBER: 199-N-53 WELL NO: Well #2 Hanford N-Area Coordinates: N/S N ND E/W W ND State Coordinates: N Not documented E Not documented Start Card #:Not documented T R S Elevation Ground surface (ft): 458.8 Estimated
Depth to water: 61.0-ft Jun85 (Ground surface)68.1-ft Jun90 GENERALIZED Driller's STRATIGRAPHY Log	Elevation of reference point: [461.76-ft] (top of casing) Height of reference point above[3.0-ft] ground surface
O+28: Small amount SAND & GRAVEL, COBBLES & BOULDERS 28+38: SAND, GRAVEL & COBBLES 38+54: Small amount SAND, GRAVEL & COBBLES 54+74: SAND, GRAVEL & COBBLES	Type of surface seal: Cement grout 12-in casing to 20-ft pulled and grouted
	I.D. of riser pipe: [8-in] Type of riser pipe: Carbon steel, ND+**51-ft
	Diameter of borehole: [9-in_nom]
	Type of filler: Not documented
	Elevation/depth top of seal Type of seal: <u>Not documented</u>
	Depth bottom of borehole [74-ft]
Drawing By: RKL/1#N-53.ASB Date:	
Reference: HANFORD WELLS	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-53

199-N-53 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : N-Area N ND E ND

N ND LAMBERT COORDINATES : DATE DRILLED Jul85

74-ft DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : ND

61.0-ft Jun85; DEPTH TO WATER (GS) :

68.1-ft, Jun90 8-in carbon steel, 3.0+~51-ft CASING DIAMETER

ELEV TOP CASING 461.76-ft 458.8-ft ELEV GROUND SURFACE : PERFORATED INTERVAL : NA 51+71-ft, SCREENED INTERVAL

8-in telescoping

FIELD INSPECTION, 15Aug89, COMMENTS

Carbon steel casing. 2-ft round pad, 4 posts, capped, and locked.

No permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA NA DATE EVALUATED EVAL RECOMMENDATION : NA

RCRA monthly water level measurements; LISTED USE Water levels measured 11Sep85+22Jun90

PUMP TYPE MAINTENANCE ND

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WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Method: Cable tool Drilling Fluid Used: Water Driller's Name: 0, Amos Drilling Company: Associated Well Drill Date Started: 03Jun87 Method: Hard tool Method: Hard tool Method: Hard tool Method: Hard tool Method: Hard tool Method: Hard tool Method: Hard tool Method: Not documented Used: Not documented Company Company: Associated Well Drill Company Complete: 17Jun87	WELL TEMPORARY NUMBER: 199-N-54 WELL NO: 1310-N #2 Hanford N-Area Coordinates: N/S N 6,772 E/W W 6,153 State Coordinates: N ND E ND Start Card #:Not documented T R S Elevation Ground surface (ft): 454.7 Estimated
Depth to water: 60.0-ft Jun87 (Ground surface)64.0-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log	Elevation of reference point: [457.51-ft] (top of casing) Height of reference point above[2.8-ft] ground surface
0+25: Sandy GRAVEL, unconsolidated backfill material, BOULDERS, COBBLES, PEBBLES, SAND and some SILT 25+49: Dark grey sandy GRAVEL COBBLES, PEBBLES, SAND and SILT 49+60: Coarse SAND, top of Ringold Fm a 49-ft	Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts Concrete grout to 5-ft
60+73: Dary greyish brown sandy GRAVEL	I.D. of riser pipe: [6-in 1 Type of riser pipe: Stainless steel Diameter of borehole: [11-in nom Type of filler, 5-47-ft Granular bentonite
	Depth top of seal: [_47.0-ft_] Type of seal: Rentonite pellets
	Depth top of sand pack: [53.0-ft] 10+20 mesh silica sand
	Depth top of screen: [_58.0-ft_] 6-in, #20-slot 304 stainless steel
	Depth bottom of screen: [73.0 ft]
Drawing By: RKL/1#N#54.ASB Date: Date:	Depth bottom of borehole [<u>73.0-ft</u>]

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-54

WELL DESIGNATION 199-N-54

CERCLA UNIT 100-Aggregate Area

1301-N, 1324-N/NA Assessment RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 6,772 W 6,153 E ND

N ND

DATE DRILLED Jun87 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 73-ft ND

60.0-ft Jun85; DEPTH TO WATER (GS) :

64.0-ft, Jul91 6-in 304 stainless steel, +2+58-ft CASING DIAMETER

ELEV TOP CASING

457.51-ft 454.7-ft, Estimated ELEV GROUND SURFACE : PERFORATED INTERVAL : SCREENED INTERVAL 58+73-ft 6-in 304

stainless steel, #20-slot FIELD INSPECTION, 25Apr91; COMMENTS

Stainless steel casing. 4x4-ft concrete pad, 4 posts, 1 removable, capped and locked, brass cap in pad

with well ID.

AVAILABLE LOGS Geologist; driller

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

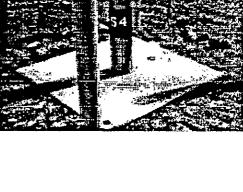
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LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 23May88+30Jul91

PUMP TYPE Hydrostar MAINTENANCE



WELL CONSTRUCTION AN	D COMPLETION SUMMARY
Drilling Sample Method: Cable tool Method: Hard tool Drilling Additives Fluid Used: Water Used: Not documented Driller's WA State Lic Nr: Not documented Drilling Company: Associated Well Drill Date Date Started: 03Jun87 Complete: 17Jun87	Start
Depth to water: 60.0-ft Jun87 (Ground surface)65.6-ft Jul91	Elevation of reference point: [457.85-ft] (top of casing)
GENERALIZED Geologist's STRATIGRAPHY Log	Height of reference point above[<u>2.9-ft</u>] ground surface Depth of surface seal [0+5.0-ft]
0+30: Sandy GRAVEL, unconsolidated backfill material, BOULDERS, COBBLES, PEBBLES, SAND and some SILT 25+49: Dark grey sandy GRAVEL COBBLES, PEBBLES, SAND and SILT 49+60: Coarse SAND, top of Ringold Fm @ 49-ft	Type of surface seal: Cement 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts Concrete grout to 5-ft
60+75: Dary greyish brown sandy GRAVEL	I.D. of riser pipe: [6-in] Type of riser pipe: Stainless steel Diameter of borehole: [11-in nom Type of filler, 5-47-ft Granular bentonite
	Depth top of seal: [_47,0-ft_] Type of seal: Bentonite pellets
	Depth top of sand pack: [52.5-ft] 10+20 mesh silica sand
	Depth top of screen: [58.0-ft] 6-in, #20-slot 304 stainless steel
	Depth bottom of screen: [73.0 ft]
	Depth bottom of borehole: [_75.0-ft_]
Drawing By:_RKL/1#N#55.ASBDate:	
Reference: HANFORD WELLS	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-55

199-N-55 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

1301-N, 1324-N/NA Assessment N-Area N 6,687 W 6,153 N ND E ND RCRA FACILITY HANFORD COORDINATES :

LAMBERT COORDINATES :

DATE DRILLED Jun87 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 75-ft ND

DEPTH TO WATER (GS) : 60.0-ft Jun85;

65.6-ft, Jul91 6-in 304 stainless steel, +2*58-ft CASING DIAMETER

ELEV TOP CASING 457.85-ft ELEV GROUND SURFACE : 455.0-ft PERFORATED INTERVAL :

NA

58+73-ft 6-in 304 SCREENED INTERVAL

stainless steel, #20-slot FIELD INSPECTION, 25Apr91; COMMENTS

Stainless steel casing.

4x4-ft concrete pad, 4 posts, 1 removable, capped and locked, brass cap in pad with well ID.

AVAILABLE LOGS Geologist; driller

TV SCAN COMMENTS NA : DATE EVALUATED NA **EVAL RECOMMENDATION:**

RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 22May88+30Jul91

PUMP TYPE Hydrostar

MAINTENANCE ND

WELL CONSTRUCTION AND COMPLETION SUMMARY				
	Sample Method: Hard tool Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documented ate complete: 25Jun87	WELL NUMBER: 199-N-56 Hanford N-Area Coordinates: N/S N 6,998 State Coordinates: N ND E ND Start Card #:Not documented T R S Elevation Ground surface (ft): 454.3 Estimated		
Depth to water: 61.0-ft June (Ground surface)65.5-ft Jule GENERALIZED Geologist's	37	Elevation of reference point: [458.09-ft] (top of casing) Height of reference point above[3.8-ft]		
O+46: Sandy GRAVEL 46+60: Silty sandy GRAVEL, Ringold Contact a 46- 60+70: Medium SAND 70+74: Gravelly SAND	ft	ground surface Depth of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts Concrete grout to 4.5-ft		
		I.D. of riser pipe: [_6-in] Type of riser pipe: Stainless steel Diameter of borehole: [11-in nom Type of filler, 4.5+47.5-ft]		
	:: :: :: ::	Granular bentonite [Depth top of seal: [_47.5-ft_] Type of seal: Bentonite pellets		
		Depth top of sand pack: [53.5-ft] 10→20 mesh silica sand		
		Depth top of screen: [59.0-ft] 6-in, #20-slot 304 stainless steel		
		Depth bottom of screen: [74.0 ft] Depth bottom of borehole [74.0-ft]		
•				
Drawing By: RKL/1#N#56.ASB Reference: HANFORD WELLS	Date:			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-56

199-N-56 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

1301-N, 1324-N/NA Assessment N-Area N 6,998 W 6,206 RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES : E ND N ND

DATE DRILLED Jun87 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 74-ft ND

DEPTH TO WATER (GS) : 61.0-ft Jun87;

65.5-ft, Jul91 6-in 304 stainless steel, +0+58-ft CASING DIAMETER

ELEV TOP CASING 458.09-ft 454.3-ft ELEV GROUND SURFACE : PERFORATED INTERVAL : NA

SCREENED INTERVAL 59+74-ft, 6-in 304

stainless steel, #20-slot FIELD INSPECTION, 25Apr91; COMMENTS Stainless steel casing.

4x4-ft concrete pad, 4 posts, 1 removable, capped and locked, brass cap in pad with well ID.

AVAILABLE LOGS Geologist;

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 23May88+30Jul91

PUMP TYPE Hydrostar

MAINTENANCE ND

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Additive Fluid Used: Water Used: Used: Used: WA State	iot documented Not documented	WELL TEMPORARY NUMBER: 199-N-57 WELL NO: 1310-N #6 Hanford N-Area Coordinates: N/S N 6,558 E/W W 5,887 State Coordinates: N ND E ND Start Card #:Not documented T R S		
Date Date Started: 12Jun87 Complete:		Elevation Ground surface (ft): 455.5 Estimated		
Depth to water: 60.0-ft Jun87 (Ground surface)65.2-ft Ju191 GENERALIZED Geologist's STRATIGRAPHY Log 0+60: Sandy GRAVEL Ringold contact 9 57-ft 60+76: Gravelly silty SAND		Elevation of reference point: [457,76-ft (top of casing) Height of reference point above[2.3-ft ground surface Depth of surface seal [0+5.0-ft Type of surface seal: Cement 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts Concrete grout to 5-ft I.D. of riser pipe: [6-in Type of riser pipe: Stainless steel		
	* + +	Diameter of borehole: [11-in non] Type of filler, 5*47-ft Granular bentonite Depth top of seal: [47.0-ft Type of seal: Bentonite pellets		
		Depth top of sand pack: [_52.0-ft 10+20 mesh silica sand		
		Depth top of screen: [_58_0-ft 6-in, #20-slot 304 stainless steel		
		Depth bottom of screen: [_73.0 ft		
Drawing By: <u>RKL/1#N#57.ASB</u> 0	ate:	Depth bottom of borehole: [<u>-76.0-ft</u>		
Reference: HANFORD WELLS				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-57

199-N-57 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

1301-N, 1324-N/NA Assessment N-Area N 6,558 W 5,887 RCRA FACILITY

HANFORD COORDINATES : LAMBERT COORDINATES : N ND E ND

Jun87 DATE DRILLED DEPTH DRILLED (GS) : 76-ft MEASURED DEPTH (GS) : ND

60.0-ft Jun85; DEPTH TO WATER (GS) :

65.2-ft, Jul91 6-in 304 stainless steel, 0+58-ft CASING DIAMETER

457.76-ft ELEV TOP CASING ELEV GROUND SURFACE : 455.5-ft PERFORATED INTERVAL : NA

SCREENED INTERVAL 58+73-ft 6-in 304

stainless steel, #20-slot FIELD INSPECTION, 25Apr91; COMMENTS

Stainless steel casing. 4x4-ft concrete pad,

4 posts, 1 removable, capped and locked, brass cap in pad with well ID.

Geologist; AVAILABLE LOGS

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 23May88+30Jul91

Hydrostar PUMP TYPE

MAINTENANCE ND

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WELL CONSTRUCTION AND	COMPLETION SUMMARY
Drilling Sample Method: Cable tool Method: Dart bailer Drilling Additives Fluid Used: Water Used: Not documented Driller's WA State Name: R. Robinson/L. Watkins Lic Nr: Not documented Drilling Company Company: Kaiser Engineers Location: Richland, WA Date Started: 14Sep87 Complete: 19Nov87	WELL TEMPORARY NUMBER: 199-N-58 WELL NO: Hanford N-Area Coordinates: N/S N 5,428 E/W W 5,867 State Coordinates: N ND E ND Start Card #:Not documented T R S Elevation Ground surface (ft): 459.58 Brass cap
Depth to water: 59.4-ft Oct87 (Ground surface)69.2-ft Sep90	Elevation of reference point: [462.88-ft]
GENERALIZED Geologist's STRATIGRAPHY Log	(top of casing) Height of reference point above[_3.3-ft] ground surface
0+17: Silty sandy GRAVEL (Excavated by backhoe) 17+30: Sandy GRAVEL 30+35: Sandy GRAVEL 35+57: Silty sandy GRAVEL 57+60: Ringold Fm contact 60+71: Sandy GRAVEL	Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts Concrete grout to 3.3-ft Diameter of borehole, 0+17-ft [13-in nom]
	I.D. of riser pipe: [_6-in] Type of riser pipe: Stainless steel
	Diameter of borehole, 17+70-ft [11-in nom Type of filler, 3.3+44.5-ft Granular bentonite
	Depth top of seal: [_44,5-ft_] Type of seal: Bentonite pellets
	Depth top of sand pack: [49.5-ft] 10-20 mesh silica sand
	Depth top of screen: [55.4-ft] 6-in, #20-slot, 304 stainless steel
	Depth bottom of screen: [70,4 ft]
e st a ke ske a	Depth bottom of borehole: [71.0-ft]
Drawing By: RKL/1#N#58.ASB Date:	
Reference: HANFORD WELLS	

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-58

WELL DESIGNATION 199-N-58

CERCLA UNIT 100-Aggregate Area

1324-N/NA RCRA FACILITY

N-Area N 5,428 W 5,867 HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E ND

Nov87 DATE DRILLED DEPTH DRILLED (GS): MEASURED DEPTH (GS): 71-ft ND

59.4-ft Oct87; DEPTH TO WATER (GS) :

69.2-ft, Sep90 6-in 304 stainless steel, +0+55.4-ft CASING DIAMETER

ELEV TOP CASING

462.88-ft 459.58 (Brass cap) ELEV GROUND SURFACE :

PERFORATED INTERVAL :

SCREENED INTERVAL : 55.5+70.4-ft, 6-in 304 stainless steel

#20-slot

FIELD INSPECTION, COMMENTS AVAILABLE LOGS Geologist; driller

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

RCRA monthly water level measurements, quarterly sampling; Water Levels measured 04Dec87+26Sep90 LISTED USE

PUMP TYPE Hydrostar

MAINTENANCE NĎ

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WE	ELL CONSTRUCTION AND	COMPLETION SUMMARY	
Drilling Addit Fluid Used: Water Used: Driller's WA Si Name: O. Amos Lic & Drilling Company: Kaiser Engineers Locat Date Date	od: Dart bailer tives Not documented tate	WELL TEMPORARY NUMBER: 199-N-59 WELL NO: Hanford N-Area Coordinates: N/S N 5,176 E/W W State Coordinates: N ND E ND Start Card #:Not documented T R Elevation Ground surface (ft): 457,58 Brass cap	
Depth to water: 59.4-ft Sep87 (Ground surface)66.6-ft Jul91 GENERALIZED Geologist's		Elevation of reference point:	
STRATIGRAPHY Log		ground surface	[0+3.0-ft]
0+20: Sity sandy GRAVEL (Excavated by backhoe) 20+63: Sandy GRAVEL 63+65: Ringold Fm contact 65+70: Silty sandy GRAVEL		Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts	
70+72.5: Silty SAND		Concrete grout to 3.0-ft Diameter of borehole, 0+20.5-ft	[<u>13-in nom</u>]
,			[<u>6-in</u>]
		Diameter of borehole, 20.5*72.5-ft Type of filler, 3.3*45.0-ft Granular bentonite	[<u>11-in_nom</u>
		Depth top of seal: Type of seal: Bentonite pellets	(<u>50.0-ft</u>]
		Depth top of sand pack: 10+20 mesh silica sand	[<u>56.5-ft</u>]
•		— Depth top of screen: 6-in, #20-slot, 304 stainless steel	(<u>56,5-ft</u>]
		Depth bottom of screen:	[<u>71.5 ft</u>]
		Depth bottom of borehole:	[<u>72.5-ft</u>]
Drawing By: RKL/1#N#59.ASB	_ Date:		
Reference: HANFORD WELLS			

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-59

199-N-59 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 1324-N/NA

HANFORD COORDINATES : N-Area N 5,176 W 5,858

E ND LAMBERT COORDINATES : N ND

Nov87 DATE DRILLED DEPTH DRILLED (GS) : 72.5-ft MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) : 59.5-ft Oct87;

66.6-ft, Jul91 6-in 304 stainless steel, +0+56.5-ft CASING DIAMETER

ELEV TOP CASING 459.53-ft

ELEV GROUND SURFACE : 457.58 (Brass cap)

PERFORATED INTERVAL : NA

SCREENED INTERVAL 56.5+71.5-ft, 6-in 304 stainless steel

#20-slot

FIELD INSPECTION, 31Aug89; COMMENTS

Stainless steel casing. 4-ft by 4-ft concrete pad,

4 posts, 1 removable, capped and locked, brass cap in pad with well ID.

AVAILABLE LOGS Geologist;

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 04Dec87+30Jul91

Hydrostar PUMP TYPE

MAINTENANCE NĎ

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Additi Fluid Used: Water Used: Driller's WA St Name: L. Watkins Lic Ni Drilling Compan Company: Kaiser Engineers Locati Date Date	d: Dart bailer ives Not documented ate r: 1271	WELL TEMPORARY NUMBER: 199-N-60 WELL NO: Hanford N-Area Coordinates: N/S N 5,351 E/W W State Coordinates: N ND E ND Start Card #:Not documented T R Elevation Ground surface (ft): 459.37 Brass cap			
Depth to water: <u>60.3-ft Oct87</u> (Ground surface) <u>68.2-ft Jul91</u> GENERALIZED Geologist's		Elevation of reference point: [(top of casing) Height of reference point above]			
STRATIGRAPHY Log		ground surface Depth of surface seal	(0+3.25-ft)		
0+20: Silty sandy GRAVEL (Excavated by backhoe) 20+25: Silty sandy GRAVEL 25+63: Sandy GRAVEL 63+65: Ringold Fm contact	Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts				
65+72: Silty gravelly SAND		Concrete grout to 3.25-ft Diameter of borehole, 0+20-ft	<u>[13-in nom</u>]		
		I.D. of riser pipe: Type of riser pipe: Stainless steel	[<u>6-in</u>]		
		Diameter of borehole, 20+72-ft Type of filler, 3.25+44.5-ft Granular bentonite	<u>[11-in nom</u>		
		Depth top of seal: Type of seal: Bentonite pellets	[<u>44,5-ft</u>]		
		Depth top of sand pack: 10→20 mesh silica sand	[<u>49.5-ft</u>]		
		Depth top of screen: 6-in, #20-slot, 304 stainless steel	<u>[55.0-ft</u>]		
		Depth bottom of screen:	[<u>70,25-ft</u>]		
		• Depth bottom of borehole:	[<u>72.0-ft</u>]		
Drawing By: RKL/1#N#60.ASB Reference: HANFORD WELLS					

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-60

WELL DESIGNATION 199-N-60

CERCLA UNIT 100-Aggregate Area

1324-N/NA RCRA FACILITY

HANFORD COORDINATES : N-Area N 5,351 W 5,867

LAMBERT COORDINATES : N ND E ND

Nov87 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 72-ft ND

60.3-ft Oct87; DEPTH TO WATER (GS) :

68.2-ft, Jul91 6-in 304 stainless steel, +2+55.0-ft CASING DIAMETER

461.94-ft ELEV TOP CASING

ELEV GROUND SURFACE : 459.37 (Brass cap)

PERFORATED INTERVAL :

NA 55.0+70.25-ft, 6-in 304 stainless steel SCREENED INTERVAL

FIELD INSPECTION, COMMENTS AVAILABLE LOGS Geologist; driller

TV SCAN COMMENTS NA DATE EVALUATED EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 04Dec87+31Jul91

PUMP TYPE Hydrostar

MAINTENANCE

WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Additiv Fluid Used: Water Used: Driller's WA Stat Name: O. Amos Lic Nr: Drilling Company	Not documented te 1224 nn: Richland, WA	Hanford Coording State Coording Start Card # Elevat	TEMPORARY	W 5,570 ND	
Depth to water: 55.1-ft Oct87 (Ground surface)68,5-ft Apr90 GENERALIZED Geologist's		•	Elevation of reference point: (top of casing) Height of reference point abo		
STRATIGRAPHY Log		<u>.</u>	ground surface Depth of surface seal	[_0+4,5-ft]	
0+20: Sity sandy GRAVEL (Excavated by backhoe) 20+25: Sandy GRAVEL 25+45: Silty sandy GRAVEL 45+55: Sandy GRAVEL		Type of surface seal: Concret 4 ft x 4 ft x 6 in surface pa 4 equidistant protective post:	<u>e</u> d		
55-59: Silty sandy GRAVEL 59-65: Ringold Fm contact 65-67.5: Fine SAND		 	Concrete grout to 4.5-ft Diameter of borehole, 0~~20-ft	(<u>13-in nom</u>)	
			I.D. of riser pipe: Type of riser pipe: Stainless steet	[<u>6-in</u>]	
		•	Diameter of borehole, "20-67.5-ft Type of filler, 4.5-41.5-ft Granular bentonite	[<u>11-in nom</u>	
			Depth top of seal: Type of seal: 1/4-in Volciay Bentonite pellets	[<u>41,5-ft</u>]	
			Depth top of sand pack: 10→20 mesh silica sand	[<u>47.0-ft</u>]	
			Depth top of screen: 6-in, #20-slot, 304 stainless steel	[<u>51.5-ft</u>]	
			Depth bottom of screen:	[<u>66.6 ft</u>]	
		[Depth bottom of borehole:	[<u>67.5-ft</u>]	
Daving Die DVI (140441 ACD C	onto:				
Drawing By: RKL/1#N#61.ASB C Reference: HANFORD WELLS)ate:				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-61

199-N-61 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

1324-N/NA RCRA FACILITY

N-Area N 5,320 W 5,570 HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E ND

DATE DRILLED Nov87 DEPTH DRILLED (GS) : 67.5-ft MEASURED DEPTH (GS) : ND

55.1-ft Oct87; DEPTH TO WATER (GS) :

68.5-ft, Apr90 (Below documented

bottom of screen)

6-in 304 stainless steel,"+2+51.5-ft 462.02-ft CASING DIAMETER

ELEV TOP CASING ELEV GROUND SURFACE :

459.70 (Brass cap)

PERFORATED INTERVAL : NA

51.5+66.6-ft, 6-in 304 stainless steel SCREENED INTERVAL

#20-slot

COMMENTS FIELD INSPECTION, 31Aug89;

Stainless steel casing. 4-ft by 4-ft concrete pad,

4 posts, 1 removable, capped and locked, brass cap in pad with well 10.

AVAILABLE LOGS Geologist:

TV SCAN COMMENTS NA : DATE EVALUATED NA EVAL RECOMMENDATION :

LISTED USE RCRA monthly water level measurements, quarterly sampling;

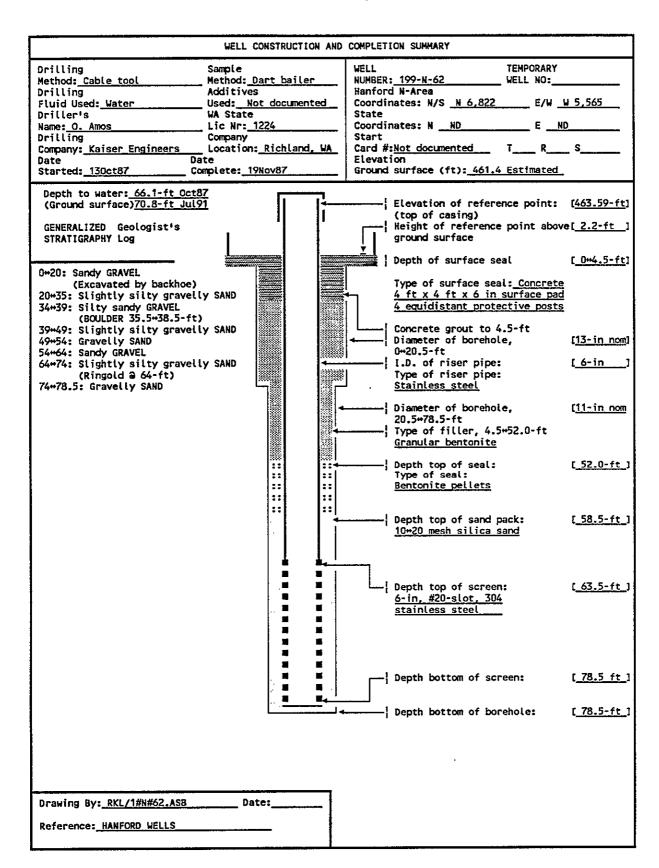
water level below screen. Water levels measured 04Dec87+24Apr90

PUMP TYPE

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-62

199-N-62 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N-Area N 6,822 W 5,565 HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E ND

DATE DRILLED Nov87 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 78.5-ft

ND 66.1-ft Oct87; DEPTH TO WATER (GS) :

70.8-ft Jul91 6-in 304 stainless steel, +1.5+63.5-ft CASING DIAMETER

ELEV TOP CASING 463.59-ft

ELEV GROUND SURFACE : 461.4-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL 63.5+78.5-ft, 6-in 304 stainless steel

#20-slot

FIELD INSPECTION, 31Aug89; COMMENTS

Stainless steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable, capped and locked, brass cap in pad with well ID.

AVAILABLE LOGS Geologist;

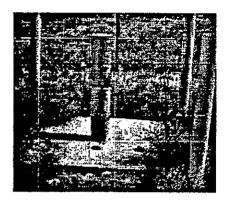
TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements; LISTED USE

Water levels measured 27May86+30Jul91

PUMP TYPE Hydrostar

MAINTENANCE ND



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-63

WELL DESIGNATION 199-N-63

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : LAMBERT COORDINATES : N-Area N 6,833 W 5,231

N ND E ND

Nov87 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 81.0-ft ND

DEPTH TO WATER (GS) :

69.6-ft Oct87; 76.2-ft, Jul91 (top-of-casing) 6-in 304 stainless steel, +2.0+66.0-ft CASING DIAMETER

ELEV TOP CASING 466.70-ft

ELEV GROUND SURFACE : PERFORATED INTERVAL : NA

SCREENED INTERVAL 66.0+81.0-ft, 6-in 304 stainless steel

#20-slot

FIELD INSPECTION, COMMENTS AVAILABLE LOGS Geologist; driller

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements; Water levels measured 27May88*30Jul91 LISTED USE

PUMP TYPE None documented

MAINTENANCE

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Sample Method: Cable tool Method: Hard tool Drilling Additives Fluid Used: Water Used: Not documented Driller's WA State Name: L. Watkins Lic Nr: Not documented Drilling Company: Kaiser Engineers Location: Richland, WA Started: 150ct87 Complete: 19Nov87	WELL TEMPORARY NUMBER: 199-N-64 WELL NO: Hanford N-Area Coordinates: N/S N 6,825 E/W W 4,981 State Coordinates: N ND E ND Start Card #:Not documented T R S Elevation Ground surface (ft): 452.2 Estimated				
Depth to water: 58.5-ft Oct87 (Ground surface)62.0-ft Jul91	Elevation of reference point: [454.63-ft]				
GENERALIZED Geologist's STRATIGRAPHY Log	(top of casing) Height of reference point above[2.45-ft] ground surface				
0+19: Not documented (Excavated by backhoe) 20+49: Sandy GRAVEL 49+64: Silty sandy GRAVEL	Depth of surface seal [_0+4.3-ft] Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts				
Ringold contact at 63-ft 64+69.5: Slightly gravelly SAND	Concrete grout to 4.3-ft Diameter of borehole, 0**20-ft				
	I.D. of riser pipe: [6-in] Type of riser pipe: Stainless steel				
	Diameter of borehole, [11-in nom 20-69.5-ft] Type of filler, 4.3-44.5-ft Bentonite crumbles				
	Depth top of seal: [44.5-ft] Type of seal: Volcaly pellets				
	Depth top of sand pack: [49,0-ft] 10+20 mesh silica sand				
	Depth top of screen: [54.0-ft] 6-in, #20-slot, 304 stainless steel				
	Depth bottom of screen: [69.0 ft]				
<u> </u>	Depth bottom of borehole: [<u>69.5-ft</u>]				
Drawing By:_RKL/1#N#64.ASBDate:					
Reference: HANFORD WELLS					

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-64

199-N-64 WELL DESIGNATION

100-Aggregate Area CERCLA UNIT

RCRA FACILITY NA

N-Area N 6,825 W 4,981

HANFORD COORDINATES : LAMBERT COORDINATES : N ND E ND

DATE DRILLED Nov87 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 69.5-ft ND DEPTH TO WATER (GS) : 58.5-ft Oct87;

62.0-ft, Jul91 6-in 304 stainless steel, +2.0+54.0-ft CASING DIAMETER

454.63-ft ELEV TOP CASING

ELEV GROUND SURFACE : 452.2-ft, Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL 54.0~69.0-ft, 6-in 304 stainless steel

#20-slot

COMMENTS FIELD INSPECTION, 28Mar90;

Stainless steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable

capped and locked, brass cap in pad with well ID.

Geologist; driller AVAILABLE LOGS

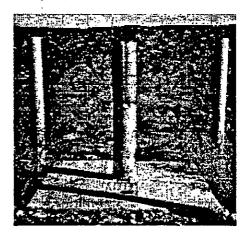
TV SCAN COMMENTS NA : DATE EVALUATED NA EVAL RECOMMENDATION : NA

RCRA monthly water level measurements; Water levels measured 27May88*31Jul91 LISTED USE

PUMP TYPE None documented

MAINTENANCE ND

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WELL CONSTRUCTION AND COMPLETION SUMMARY					
Drilling Sample Method: Cable tool Method: Hard tool	WELL TEMPORARY NUMBER: 199-N-65 WELL NO:				
Drilling Additives Fluid Used: Water Used: Not documented Driller's WA State Name: L. Watkins/O. Amos Lic Nr: ND/1224 Drilling Company	Hanford N-Area Coordinates: N/S N 6,610 E/W W 4,892 State Coordinates: N ND E ND Start Card #:Not documented T R S				
Company: Kaiser Engineers Location: Richland, WA Date Date Started: 270ct87 Complete: 19Nov87	Elevation Ground surface (ft): 453.8 Estimated				
Depth to water:58.8-ft Oct87 (Ground surface)63.0-ft Jul91 GENERALIZED Geologist's STRATIGRAPHY Log 0+60: Silty sandy GRAVEL (0+15-ft excavated by backhoe) Ringold contact at 48-ft 60+65: Slightly silty gravelly SAND 65+69: Silty sand GRAVEL 69+71: Gravelly SAND	Elevation of reference point: [456.44-ft] (top of casing) Height of reference point above [2.6-ft] ground surface Depth of surface seal [0+5.5-ft]				
Drawing By: RKL/1#N#65.ASB Date: Reference: HANFORD WELLS					

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-65

WELL DESIGNATION 199-N-65

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

HANFORD COORDINATES : N-Area N 6,610 W 4,892

LAMBERT COORDINATES : E ND N ND

Nov87 DATE DRILLED DEPTH DRILLED (GS) : 71.0-ft

MEASURED DEPTH (GS) : ND

58.8-ft Oct87; DEPTH TO WATER (GS) :

63.9-ft, Jul91 6-in 304 stainless steel, +2.6+56.0-ft CASING DIAMETER

456.44-ft ELEV TOP CASING

ELEV GROUND SURFACE : 453.8-ft, Estimated

PERFORATED INTERVAL :

SCREENED INTERVAL 56.0+71.0-ft, 6-in 304 stainless steel

#20-slot

COMMENTS FIELD INSPECTION, 28Mar90;

Stainless steel casing.

4-ft by 4-ft concrete pad,

4 posts, 1 removable, capped and locked, brass cap in pad with well ID.

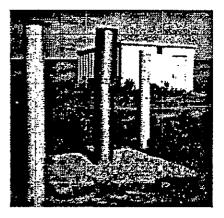
Geologist: driller AVAILABLE LOGS

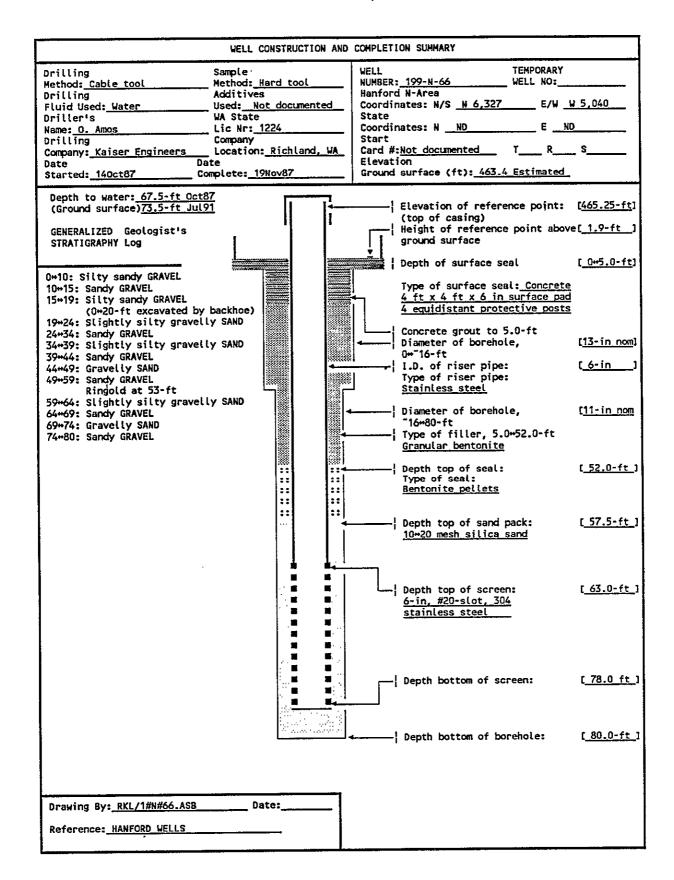
TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION :

RCRA monthly water level measurements; Water levels measured 27May88+31Jul91 LISTED USE

PUMP TYPE None documented

MAINTENANCE ND





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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-66

199-N-66 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 1301-N

N-Area N 6,327 W 5,040 HANFORD COORDINATES :

LAMBERT COORDINATES : N ND E ND

Nov87 DATE DRILLED DEPTH DRILLED (GS) : 80.0-ft

MEASURED DEPTH (GS) :

DEPTH TO WATER (GS) : 67.5-ft Oct87;

73.5-ft, Jul91 6-in 304 stainless steel, CASING DIAMETER

+1.9+63.0-ft ELEV TOP CASING 465.25-ft

ELEV GROUND SURFACE : 463.4-ft, Estimated

PERFORATED INTERVAL : NA

63.0+78.0-ft, SCREENED INTERVAL

6-in 304 stainless steel

#20-slot

FIELD INSPECTION, 26Apr91; COMMENTS

Stainless steel casing.

4-ft x 4-ft concrete pad, 4 posts, 1 removable capped and locked, brass cap in pad with well ID. Geologist; driller

AVAILABLE LOGS

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

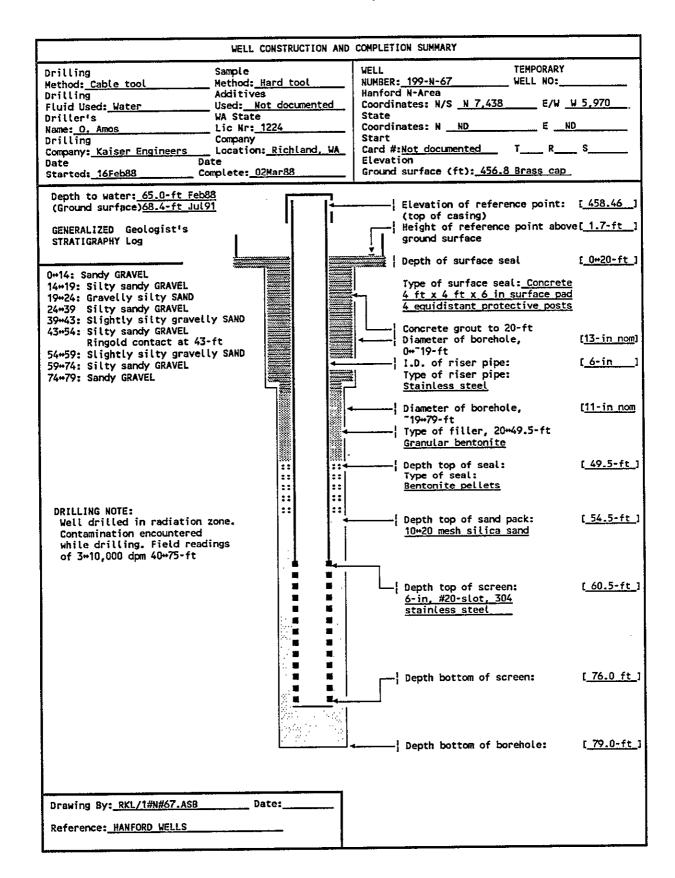
Water levels measured 27May88+31Jul91

PUMP TYPE None documented

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-67

WELL DESIGNATION 199-N-67

100-Aggregate Area CERCLA UNIT

RCRA FACILITY 1301-N

H-Area N 7,438 W 5,970 HANFORD COORDINATES :

LAMBERT COORDINATES : H ND E ND

Mar88 DATE DRILLED DEPTH DRILLED (GS) : 79.0-ft

MEASURED DEPTH (GS) : ND

DEPTH TO WATER (GS) : 65.0-ft Feb88;

68.4-ft, Jul91 6-in 304 stainless steel, +2.0+60.5-ft CASING DIAMETER

458.46-ft ELEV TOP CASING

ELEV GROUND SURFACE : 456.77-ft Brass cap

PERFORATED INTERVAL :

60.5+76.0-ft, 6-in 304 stainless steel SCREENED INTERVAL

#20-slot

COMMENTS FIELD INSPECTION, 26Apr91;

Stainless steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable capped and locked, brass cap in pad with well ID. Geologist; driller

AVAILABLE LOGS

TV SCAN COMMENTS NA DATE EVALUATED EVAL RECOMMENDATION : NA

RCRA monthly water level measurements, quarterly sampling; LISTED USE

Water levels measured 19Dec88+31Jul91

PUMP TYPE Hydrostar

MAINTENANCE ND

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WEL	L CONSTRUCTION AND	COMPLETION SUMMARY	
Drilling Additi Fluid Used: Water Used: Driller's WA Str Name: L. Watkins Lic Nr Drilling Company: Kaiser Engineers Date Date	: Hard tool ves Not documented ite : Not documented	WELL TEMPORARY NUMBER: 199-N-69 WELL NO: Hanford N-Area Coordinates: N/S N 7,443 E/W W State Coordinates: N ND E ND Start Card #:Not documented T R Elevation Ground surface (ft): 457,4 Brass cap	
Depth to water: 67.5-ft May88 (Ground surface)69.1-ft Jul91 GENERALIZED Geologist's		Elevation of reference point: (top of casing) Height of reference point above	
STRATIGRAPHY Log 0+9: Silty sandy GRAVEL 9+19: Sandy GRAVEL 19+24: Gravelly SAND 24+29 Sandy GRAVEL		ground surface Depth of surface seal Type of surface seal: Concrete 4 ft x 4 ft x 6 in surface pad 4 equidistant protective posts	[<u>0+20-ft</u>]
29-42: Gravelly SAND 42-49: Sandy GRAVEL Ringold contact at 42-ft 49-54: Silty sandy GRAVEL 54-64: Slightly silty gravelly SAND 64-84: Silty sandy GRAVEL 84-89: Sandy GRAVEL 89-94: Slightly gravelly SAND		Cement grout, 2*21-ft Diameter of borehole, 0**20-ft I.D. of riser pipe: Type of riser pipe: Stainless steel	[<u>13-in nom</u>]
94.99: Gravelly silty SAND 99-101: Silty sandy GRAVEL 101-104: CLAY DRILLING NOTE: Contamination encountered "50-100+-ft, 100-500 cpm on GM		Diameter of borehole,	[<u>76.0-ft</u>
		Depth top of sand pack: 20+40 mesh silica sand	[78.5-ft
		Depth top of screen: 6-in, #10-slot, 304 stainless steel	[90.0-ft
		Depth bottom of screen:	[<u>100.0-ft</u>
		←	[104.0-ft
Drawing By: RKL/1#N#69.ASB Reference: HANFORD WELLS	Date:		

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-69

199-N-69 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

1301-N RCRA FACILITY HANFORD COORDINATES : N-Area N 7,443 W 6,008

LAMBERT COORDINATES : E ND N ND

Jun88 DATE DRILLED DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 104.0-ft

DEPTH TO WATER (GS) :

67.5-ft May88; 69.1-ft, Jul91 6-in 304 stainless steel, CASING DIAMETER

+2.5+90.0-ft ELEV TOP CASING 458.84-ft

ELEV GROUND SURFACE : 457.43-ft Brass cap

PERFORATED INTERVAL :

90.0+100.0-ft, SCREENED INTERVAL

6-in 304 stainless steel

#10-slot

COMMENTS FIELD INSPECTION, 26Apr91;

Stainless steel casing.

4-ft by 4-ft concrete pad, 4 posts, 1 removable capped and locked, brass cap in pad with well ID.

Located in radiation zone.

AVAILABLE LOGS Geologist; driller

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

Water levels measured 19Dec88+31Jul91

PUMP TYPE Hydrostar

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 199-N-70

WELL DESIGNATION 199-N-70

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY 1325-N

HANFORD COORDINATES : N-Area N 8,375 W 4,414

LAMBERT COORDINATES : E ND N ND

Jun88 DATE DRILLED DEPTH DRILLED (GS) : 104.4-ft MEASURED DEPTH (GS) : ND

58.8-ft Jun88; DEPTH TO WATER (GS) :

62.6-ft, Jul91 6-in 304 stainless steel, +2.9-89.1-ft CASING DIAMETER

ELEV TOP CASING 454.21-ft

ELEV GROUND SURFACE : 451.88-ft Brass cap PERFORATED INTERVAL :

SCREENED INTERVAL 89.1+99.1-ft, 6-in 304 stainless steel

COMMENTS

#10-slot

FIELD INSPECTION, 25Apr91; Stainless steel casing. 4-ft by 4-ft concrete pad, 4 posts, 1 removable

capped and locked, brass cap in pad with well ID.

Geologist; driller AVAILABLE LOGS

TV SCAN COMMENTS DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE RCRA monthly water level measurements, quarterly sampling;

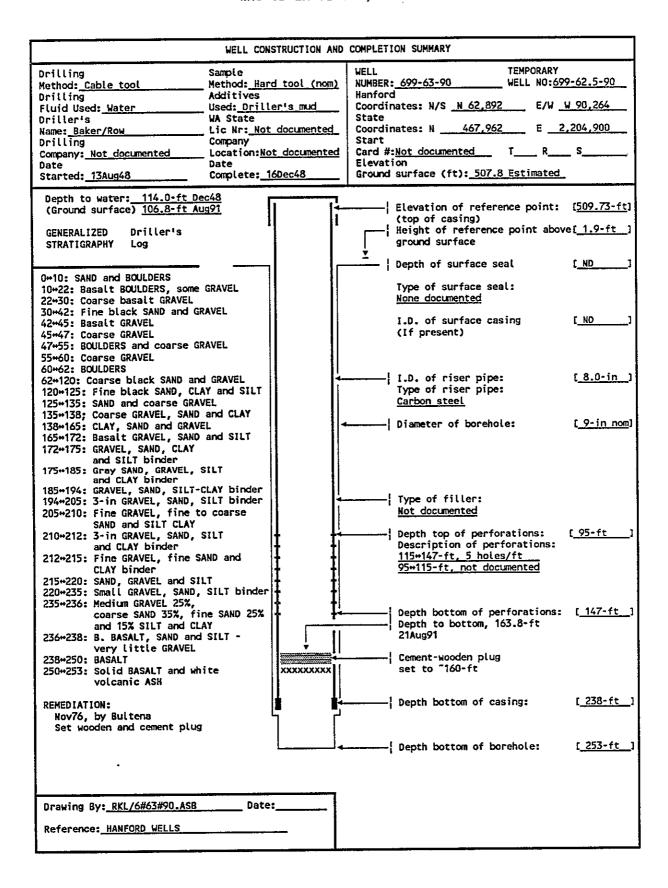
Water levels measured 19Sep88+31Jul91

PUMP TYPE Hydrostar

MAINTENANCE ND

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-63-90

699-63-90 WELL DESIGNATION

CERCLA UNIT 100-BC-5 Background

RCRA FACILITY NA

HANFORD COORDINATES : 62,892 W 90,264 N N 467,962 E 2,204,900 LAMBERT COORDINATES :

DATE DRILLED Aug+Dec48 DEPTH DRILLED (GS) : 253-ft

163.84-ft, 21AugJun91 114.0-ft, Aug52; 106.8-ft, 21Aug91 8-in, +1.9*238-ft 509.73-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

CASING DIAMETER ELEV TOP CASING 507.8-ft Estimated 95+147-ft ELEV GROUND SURFACE :

PERFORATED INTERVAL : TV 98+160-ft

SCREENED INTERVAL NA

COMMENTS

FIELD INSPECTION, 27Feb91,

Carbon steel casing,

pump hanger holes, no pad, no posts,

capped, and locked.

No permanent identification.

Not in radiation zone.

OTHER: Driller

AVAILABLE LOGS

TV SCAN COMMENTS 21Jun91, depths referenced to ground surface;

Depth to bottom: 163.4-ft, sandy.

Depth to water: 104.3-ft, some floating debris. Water clear, a lot of

dislodged scale and suspended debris.

Vadose casing some corrosion/scale rust; submerged casing fairly

heavy corrosion/scale/rust. Perforations start at 98.4-ft to not determined.

The well needs cleaning.

20Aug91;

Depth to bottom: 163.7-ft, sandy.

Depth to water: 106.6-ft, some floating debris. Water clear.

Vadose casing clean; submerged casing clean. Perforations start at 98.4-ft

to 160.4-ft, 2 cuts/rd/ft. Most were open and clean even above water.

The well looks very good.

DATE EVALUATED ΝA

EVAL RECOMMENDATION :

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LISTED USE

Sampled 1989 for ³H, NO₃,; water levels measured 09Jan49*11Jun91

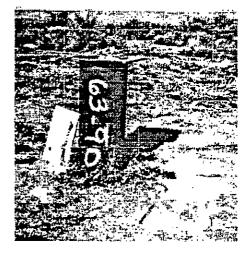
Electric submersible, intake set at 112.2-ft (top-of-casing) 31May91; pulled pump. No contamination encountered. PUMP TYPE

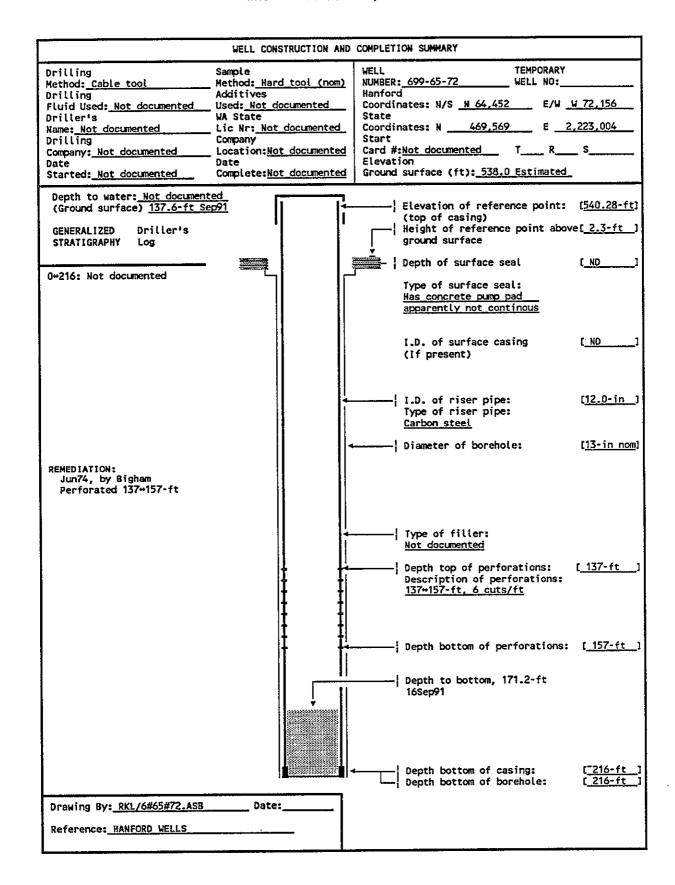
MAINTENANCE

21Jun91; TV run. 13Aug91; Brushed casing and bailed debris. No contamination encountered. 16Aug91; Developed well to <5 NTU.

20Aug91; TV run.

21Aug91; Installed electric submersible pump.





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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-65-72

699-65-72 WELL DESIGNATION

100-BC-5 Background CERCLA UNIT RCRA FACILITY NA N 64,452 W 72,156 HANFORD COORDINATES :

LAMBERT COORDINATES : N 469,569 E 2,223,004

DATE DRILLED ND DEPTH DRILLED (GS) :

216-ft 171.2-ft, 16Sep91 137.6-ft, 16Sep91 12-in, +2.3+216-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : CASING DIAMETER

540.28-ft ELEV TOP CASING

ELEV GROUND SURFACE : 538.0-ft Estimated

PERFORATED INTERVAL : 137+157-ft

SCREENED INTERVAL

(7)

FIELD INSPECTION, 25Feb91, COMMENTS Carbon steel, pump hanger holes,

pump pad present, no posts.

Capped and locked.

No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS Driller 20Aug91: TV SCAN COMMENTS

Depth to bottom: 171.6-ft, silty.

Depth to water: 138.1-ft, some floating debris. Water clear, with some

dislodged scale and suspended debris.

Vadose casing, some corrosion/scale/rust; submerged casing heavy corrosion/scale/rust near bottom.

Perforations not detectable. The well needs cleaning.

13Sep91;

NA

Depth to bottom: 171.6-ft, sandy.

Depth to water: 138.4-ft, some floating debris. Water clear, some suspended debris. Vadose casing clean, pitted from 55-ft to water surface; submerged casing clean.

Perforations start at 138.8-ft to not detectable, most were open and clean.

Unable to determine number of slots.

DATE EVALUATED

EVAL RECOMMENDATION: NA

LISTED USE

Sampled 1989 for ³H, U, ¹²⁹I, NO₃,; water levels measured 15Feb49**03Jun91

PUMP TYPE

Electric submersible, intake set at 146.3-ft (top-of-casing) 19Aug91; pulled pump. No contamination encountered. 20Aug91; TV run. MAINTENANCE

03Sep91; Brushed casing and bailed debris. No contamination encoouontered.

12Sep91; Developed well to <5 NTU. 13Sep91; TV run.

16Sep91; Installed electric submersible pump.

WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling	Sample Method: Hard tool (nom)	WELL TEMPORARY NUMBER: 699-65-83 WELL NO:		
Method: <u>Cable tool</u> Drilling	Additives	Hanford		
Fluid Used: Water	Used: Not documented	Coordinates: N/S N 64,944 E/W W 82,961		
Driller's	WA State	State		
Name: Rodda	Lic Nr: Not documented_	Coordinates: N <u>470,033</u> E <u>2,212,197</u>		
Drilling	Company	Start		
Company: Bach Drilling Co	Location: Yakima, WA	Card #: Not documented T R S		
Date	Date	Elevation		
Started: 27Mar67	Complete: 03Apr67	Ground surface (ft): 482.5 Estimated_		
Depth to water: 81.1-ft Mar (Ground surface) 81.9-ft Aug	67 91	Elevation of reference point: [485,63-ft (top of casing)		
GENERALIZED Driller's STRATIGRAPHY Log		Height of reference point above [3.1-ft ground surface		
A C CONTROL OF CONTROL	__	Depth of surface seal [ND		
0+5: SAND, GRAVEL & COBBLES 5+20: Loose SAND & GRAVEL 20+25: Lightly cemented SAND	& GRAVEL	Type of surface seal: None documented		
25+55: Loose SAND & GRAVEL 55+75: Open GRAVEL 75+80: Open GRAVEL some SAND 80+85: SAND & GRAVEL 85+90: Mostly very fine SAND,		I.D. of surface casing [<u>ND</u> (If present)		
GRAVEL and CLAY 90+100: Fine SAND, some GRAVE 100+115: SAND & GRAVEL 115+121: SAND		I.D. of riser pipe: [6.0-in Type of riser pipe: Carbon steel		
		Diameter of borehole: [_7-in_nom		
		Type of filler: Not documented		
		Depth top of perforations: [_60-ft_ Description of perforations: 86\(\times 120-ft, 6 \text{ holes/ft} \) 60\(\times 80-ft, 6 \text{ holes/ft} \)		
REMEDIATION Nov76, by Bultena Set cement plug to 117-ft		Depth to bottom, 115.1-ft 21Aug91		
		Depth bottom of perforations: [120-ft] Depth bottom of casing: [121-ft] Depth bottom of borehole: [121-ft] 1-ft cement plug in bottom set by driller		
Drawing By: <u>RKL/6#65#83.ASB</u>	Date:			
Reference: HANFORD WELLS				
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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-65-83

WELL DESIGNATION 699-65-83

CERCLA UNIT 100-BC-5 Background

RCRA FACILITY NA

HANFORD COORDINATES : 64,944 W 82,961 LAMBERT COORDINATES : N 470,033 E 2,212,197

DATE DRILLED Mar*Apr67 121-ft

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 115.1-ft, 21Aug91 DEPTH TO WATER (GS) : 81.1-ft, Mar67;

81.9-ft, 21Aug91 6-in, +3.1+121-ft

CASING DIAMETER 485.63-ft **ELEV TOP CASING** ELEV GROUND SURFACE : 482.5-ft Estimated

PERFORATED INTERVAL: 60+120-ft

SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 25Feb91,

Carbon steel, pump hanger hole, no pad, no posts. Capped and locked. No permanent identification.

Not in radiation zone.

OTHER: Driller

AVAILABLE LOGS TV SCAN COMMENTS 21Jun91,

depths referenced to ground surface; Depth to bottom: 115.5-ft, silty.

Depth to water: 83.0-ft, some floating debris, (sample filter).

Water clear, some dislodged scale and suspended debris.

Vadose casing had light scale just above water. Submerged casing very dirty and scaly. Perforations start at 60.7-ft to not determined, 4 cuts/rd/ft.

The well needs cleaning.

20Aug91;

Depth to bottom: 115.2-ft, sandy.

Depth to water: 81.7-ft, surface clean. Water clear.

Vadose casing clean; submerged casing clean. Perforations start at 59.0-ft

to not determined, 42 cuts/rd/ft. Open above and below water.

This well is in good shape except for some heavy algae below water.

DATE EVALUATED

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EVAL RECOMMENDATION:

LISTED USE

Sampled 1989 for ³H, NO₃,; water levels measured 25Sep67+03Jun91

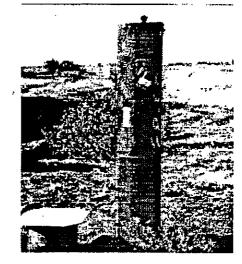
PUMP TYPE

Electric submersible, intake set at 91.6-ft, (top-of-casing). 06Jun91; Pulled pump. No contamination encountered. 21Jun91; TV run. MAINTENANCE

12Aug91; Brushed casing and bailed debris. No contamination encountered.

15Aug91; Developed well to <5 NTU. 20Aug91; TV run.

21Aug91; Installed electric submersible pump.



	WELL CONSTRUCTION AND COMPLETION SUMMARY				
Orilling Method: Cable tool Drilling Fluid Used: Water Driller's Name: Baker Drilling Company: Not documented Date Started: 15May72	Sample Method: Hard tool (nom) Additives Used: Not documented WA State Lic Nr: Not documented Company Location: Not documented Date Complete: 02Jun72	WELL TEMPORARY NUMBER: 699-66-64 WELL NO: Hanford Coordinates: N/S N 66,483 E/W W 64,249 State Coordinates: N 471,620 E 2,230,905 Start Card #:Not documented T R S Elevation Ground surface (ft): 503.0 Estimated			
Depth to water: 102-ft May72 (Ground surface)101.8-ft Sep GENERALIZED Driller's STRATIGRAPHY Log 0+10: COBBLES, SAND, GRAVEL 10+45: SAND, COBBLES, GRAVEL 45+60: Packed SAND & GRAVEL 60+96: SAND, COBBLES, GRAVEL 102+112: SAND, COBBLES, GRAVEL 112+118: Not documented	91	Elevation of reference point: [505,92-ft] (top of casing) Height of reference point above[2.9-ft] ground surface Depth of surface seal: ND			
Drawing By: <u>RKL/6#66#64.ASB</u> Reference: <u>HANFORD WELLS</u>	Date:				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-66-64

WELL DESIGNATION 100-KR-4 Background CERCLA UNIT RCRA FACILITY NA HANFORD COORDINATES : N 66,483 W 64,249 N 471,620 E 2,230,905 LAMBERT COORDINATES : DATE DRILLED May+Jun72

699-66-64

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 118-ft 119.1-ft, 16Sep91 102.0-ft, May72; DEPTH TO WATER (GS) :

101.8-ft, 16Sep91 6-in, +2.9+96-ft, pulled back from 118-ft 505.92-ft CASING DIAMETER

ELEV TOP CASING

ELEV GROUND SURFACE : 503.0-ft Estimated NA

PERFORATED INTERVAL :

96+116-ft, .050-slot ARMCO iron SCREENED INTERVAL FIELD INSPECTION, 25Feb91, COMMENTS Carbon steel, pump hanger hole, no pad, no posts. Capped and locked. No permanent identification.

Not in radiation zone.

OTHER:

Driller AVAILABLE LOGS TV SCAN COMMENTS 08Aug91:

Depth to bottom: 119.0-ft, sandy. Depth to water: 101.7-ft, some floating debris.

Water clear with some suspended debris.

Vadose casing light corrosion/scale/rust, some pitting just above screen; submerged casing clean. Continous wrap screen from 98.8-ft to not determined.

Screen cruddy, needs cleaning.

DATE EVALUATED EVAL RECOMMENDATION :

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Sampled 1989 for ³H, U, ⁹⁰Sr, ¹²⁹I, NO₃; water levels measured 050ct72+11Jun91 LISTED USE

Electric submersible, intake set at 110.7-ft, (top-of-casing). 06Aug91; Pulled pump. No contamination encountered. PUMP TYPE

MAINTENANCE

08Aug91; TV run.
22Aug91; Brushed casing and bailed debris. No contamination encountered.
04Sep91; Developed well to <5 NTU.

16Sep91; Installed electric submersible pump.

WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Method: <u>Air rotary</u> Drilling	Sample Method: Air returns Additives	WELL TEMPORARY NUMBER: 699-66-91 WELL NO: UG	iB-4	
Fluid Used: None Driller's	Used: None WA State	Coordinates: N/S N 65,708 E/W k	90,879	
Name: Not documented Drilling Company: Soil Sampling Ser. Date	Lic Nr: Not documented Company Location: Puyallup, WA Date	Coordinates: N 470,776 E 2, Start Card #:Not documented T R Elevation		
Started: Not documented	Complete: May73	Ground surface (ft): 464.6 Estimated		
Depth to water: 102-ft May7 (Ground surface)63.4-ft Sep9 GENERALIZED Geologist's STRATIGRAPHY Log O+4: Cse GRAVEL w/fine SAND & 4+6: COBBLES & cse GRAVEL w/f 6+10: Med GRAVEL w/fine SAND 10+2: Med to cse GRAVEL w/fi 22+26: Fine to cse GRAVEL 26+28: Cse SAND w/fine to cse 28+38: Cse GRAVEL w/SILT 40+44: Med GRAVEL w/SILT 44+58: Fine to cse GRAVEL w/s (brown SILT at 57 ft) 58+60: Fine GRAVEL w/fine sil 60+78: Cse to med GRAVEL w/fi 78+82: SAND and SILT w/cse GR 82+98: Med to cse sandy GRAVE 98+163: BASALT 163+165: CLAY 165+170: Green SAND, CLAY and basalt GRAVEL 170+175: Fine SAND and CLAY 175+178: Fine SAND, SILT and 178+185: Fine to cse GRAVEL (Brown SILT at 184 ft) 185+190: Fine to cse GRAVEL green SAND	SILT ine SAND & SILT ne SAND GRAVEL ilt ty SAND ne SAND AVEL L	Elevation of reference point:		
		——— Depth to bottom, 182.5-ft 11Sep91		
Drawing By: <u>RKL/6#66#91_ASB</u>	Date:	——— Depth bottom of borehole:	[<u>190-ft</u>]	
Reference: HANFORD WELLS				

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-66-91

699-66-91 WELL DESIGNATION

CERCLA UNIT 100-BC-5 Background

RCRA FACILITY NA

N 65,708 W 90,879 N 470,776 E 2,204,278 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED May73

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 190-ft 182.5-ft, Sep91 102-ft, May72; 632.4-ft, Sep91 DEPTH TO WATER (GS) :

6-in, from +3.1+"98-ft 467.75-ft CASING DIAMETER ELEV TOP CASING 464.6-ft, Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA SCREENED INTERVAL :

COMMENTS FIELD INSPECTION, 09Aug91,

Carbon steel casing.

No pad, No posts, capped, not locked.

No permanent identification.

OTHER:

AVAILABLE LOGS Geologist TV SCAN COMMENTS

20Aug91; Depth to bottom: 181.8-ft, silty.

Depth to water: 62.7-ft, some floating debris.

Water clear with some dislodged scale and suspended debris. Vadose and submerged casing some corrosion/scale/rust.

Casing ended at 97.8-ft, open hole below that. The casing needs cleaning.

13Sep91;

Depth to bottom: Not determined.

Depth to water: 63.3-ft, some floating debris. Water murky at top, clearer near bottom of casing..

Vadose casing clean; submerged casing clean. Camera only run to bottom of casing.

DATE EVALUATED EVAL RECOMMENDATION : NA

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Not sampled 1989; LISTED USE

water levels measured 150ct73+11Jun91

PUMP TYPE None documented 20Aug91; TV run. MAINTENANCE

29Aug91; Brushed casing and bailed debris. 11Sep91; Developed well to <5 NTU.

13Sep91; TV run

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-67-86

. WELL DESIGNATION 699-67-86

100-BC-5 Background CERCLA UNIT

RCRA FACILITY NA

N 66,996 W 85,997 N 472,077 E 2,209,156 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Aug+Oct62 467-ft DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

99.1-ft, 02Aug91 71.0-ft, Aug62; 69.8-ft, 02Aug91 8-in, from +1.8-464-ft 472.39-ft CASING DIAMETER ELEV TOP CASING

ELEV GROUND SURFACE : 470.6-ft Estimated PERFORATED INTERVAL : 60+460-ft

SCREENED INTERVAL NA

FIELD INSPECTION, 25Feb91, COMMENTS

Carbon steel, pump hanger hole, no pad, no posts. Capped and locked. No permanent identification.

Not in radiation zone.

OTHER: Driller

AVAILABLE LOGS TV SCAN COMMENTS 21Jun91, depths referenced to ground surface;

Depth to bottom: 98.4-ft, sandy.

Depth to water: 68.9-ft, some floating debris. Water clear, no dislodged scale

or suspended debris.

Vadose casing clean, submerged casing light corrosion/scale/rust. Perforations start at 66.6-ft to not determined, visible below water.

The well doesn't need cleaning.

DATE EVALUATED EVAL RECOMMENDATION : NA

67

Sampled 1989 for ³H, NO₃,; water levels measured 170ct62*11Jun91 LISTED USE

Electric submersible, intake set at 81.8-ft, (top-of-casing). PUMP TYPE MAINTENANCE

31May91; Pulled pump. No contamination encountered. 21Jun91; TV run. 02Aug91; Installed electric submersible pump.

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WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Method: Cable tool	Sample Method: Hard tool (nom)	WELL TEMPORARY NUMBER: 699-70-68 WELL NO:		
Drilling Fluid Used: Not documented	Additives Used: Not documented	Hanford Coordinates: N/S N 70,123 E/W	W 68,357	
Driller's Name: <u>Gentz/Row</u> Drilling	WA State Lic Nr: Not documented Company	State Coordinates: N 475,249 E 2 Start	2,226,788	
Company: Not documented Date	Location: Not documented Date	Card #:Not documented T R Elevation	_ s	
Started: 20May54	Complete: 06Jul54	Ground surface (ft): 524.4 Estimated	•	
Depth to water: 126.5-ft Ju (Ground surface) 123.8-ft Se GENERALIZED Driller's STRATIGRAPHY Log 0+15: BOULDERS - SAND and SIL 15+20: BOULDERS and GRAVEL 20+25: COBBLES and GRAVEL 25+30: Coarse GRAVEL 30+35: Fine and coarse black 35+40: Black SAND and GRAVEL 40+50: Black SAND 50+55: SAND, small and coarse 55+60: GRAVEL, small to coarse 60+70: SAND and GRAVEL 70+80: SAND and GRAVEL layers 80+100: GRAVEL and SAND 100+105: SAND 105+149: GRAVEL and SAND	SAND GRAVEL e - SAND	Elevation of reference point: (top of casing) Height of reference point above ground surface Depth of surface seal: None documented I.D. of surface casing (If present) I.D. of riser pipe: Type of riser pipe: Carbon steel Diameter of borehole: Type of filler: Not documented Depth top of perforations: Description of perforations: Not documented		
Drawing By: RKL/6#70#68.ASB Reference: HANFORD WELLS	Date:	Installation not documented Cement plug at 146-ft Depth bottom of perforations: Depth bottom of casing: Depth bottom of borehole:	E <u>147-ft</u>] E <u>149-ft</u>] E <u>149-ft</u>]	

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-70-68

699-70-68 WELL DESIGNATION CERCLA UNIT 100-KR-4 Background RCRA FACILITY NA 70,123 W 68,357 HANFORD COORDINATES : N N 475,249 E 2,226,788 LAMBERT COORDINATES : May-Jul54 DATE DRILLED 149-ft DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 145.1-ft, 16Sep91 126.5-ft, Jul54; 123.8-ft 16Sep91 DEPTH TO WATER (GS) : 8-in, from +1.8+149-ft CASING DIAMETER

ELEV TOP CASING 526.21-ft ELEV GROUND SURFACE : 524.4-ft Estimated

PERFORATED INTERVAL : 126+147-ft

SCREENED INTERVAL NA

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FIELD INSPECTION, 25Feb91, COMMENTS

Carbon steel, pump hanger holes, no pad, no posts. Capped and locked.

No permanent identification. Not in a radiation zone.

OTHER:

Driller AVAILABLE LOGS TV SCAN COMMENTS 08Aug91;

Depth to bottom: 145.7-ft, silty. Depth to water: 123.0-ft, some floating debris.

Water clear with some dislodged scale and suspended debris.

Vadose casing light corrosion/scale/rust;

submerged casing fairly heavy corrosion/scale/rust. Perforations start at 117.1-ft to not determined.

The well needs cleaning.

13Spe91;

Depth to bottom: 144.7-ft, sandy.

Depth to water: 123.7-ft, a little floating debris. Water clear. Vadose casing clean, some pitting 117+123-ft; submerged casing clean. Perforations start at 117.8-ft to not determined at 1 cut/rd/ft.

Most perforations were open and clean. to 160.4-ft, 2 cuts/rd/ft.

NA

DATE EVALUATED

EVAL RECOMMENDATION :

NA LISTED USE

Sampled 1989 for ³H, NO₃,; water levels measured 31Aug55+11Jun91 PUMP TYPE

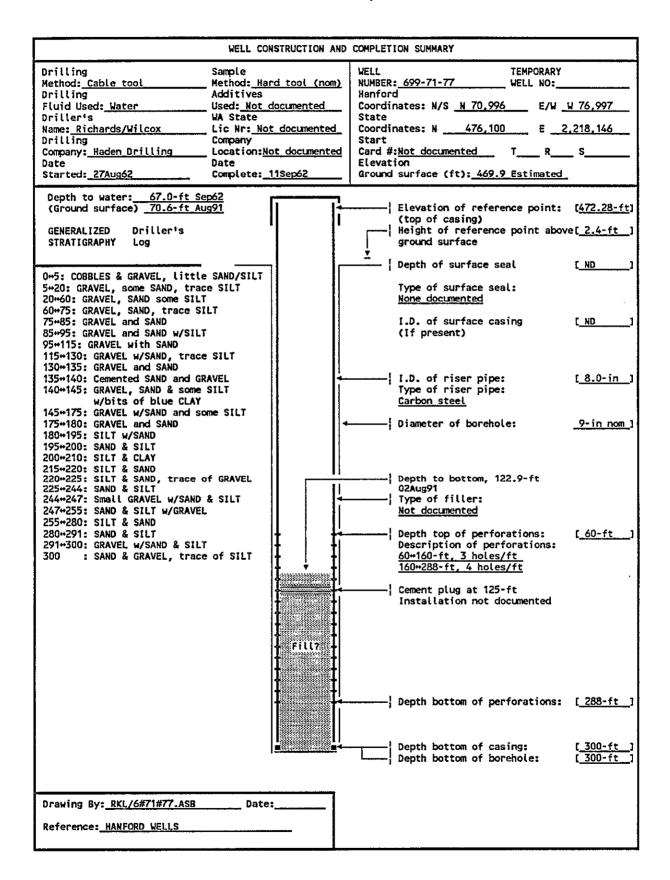
Electric submersible, intake set at 132.2-ft (top-of-casing)

MAINTENANCE

06Aug91; Pulled pump. No contamination encountered. 08Aug91; TV run. 23Aug91; Brushed casing and bailed debris. No contamination encountered.

05Sep91; Developed well to <5 NTU.

13Sep91; TV run. 16Sep91; Installed electric submersible pump.



SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-71-77

WELL DESIGNATION 699-71-77

100-BC-5 Background CERCLA UNIT

RCRA FACILITY NA

70,996 W 76,997 HANFORD COORDINATES : N N 476,100 E 2,218,146 LAMBERT COORDINATES :

DATE DRILLED Aug+Sep62 300-ft DEPTH DRILLED (GS) :

122.9-ft, 02Aug91 67.0-ft, Sep62; 70.6-ft, 02Aug91 MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

8-in, from +2.4+300-ft 472.28-ft CASING DIAMETER ELEV TOP CASING

ELEV GROUND SURFACE : 469.9-ft Estimated

60+288-ft PERFORATED INTERVAL : SCREENED INTERVAL NA

FIELD INSPECTION, 26Feb91, COMMENTS

Carbon steel, pump hanger hole, no pad, no posts. Capped and locked.

No permanent identification. Not in a radiation zone.

OTHER:

AVAILABLE LOGS Driller

TV SCAN COMMENTS 10Jun91, depths referenced to ground surface;

Depth to bottom: 124.0-ft, silty.

Depth to water: 69.6-ft, some floating debris. Water clear, no dislodged scale,

some suspended debris.

Vadose and submerged casing very light corrosion/scale/rust.
Perforations start at 58.4-ft to not determined, 4 cuts/rd/ft. The well is in

good shape, a lot of perforations were visible above water.

The well doesn't need cleaning.

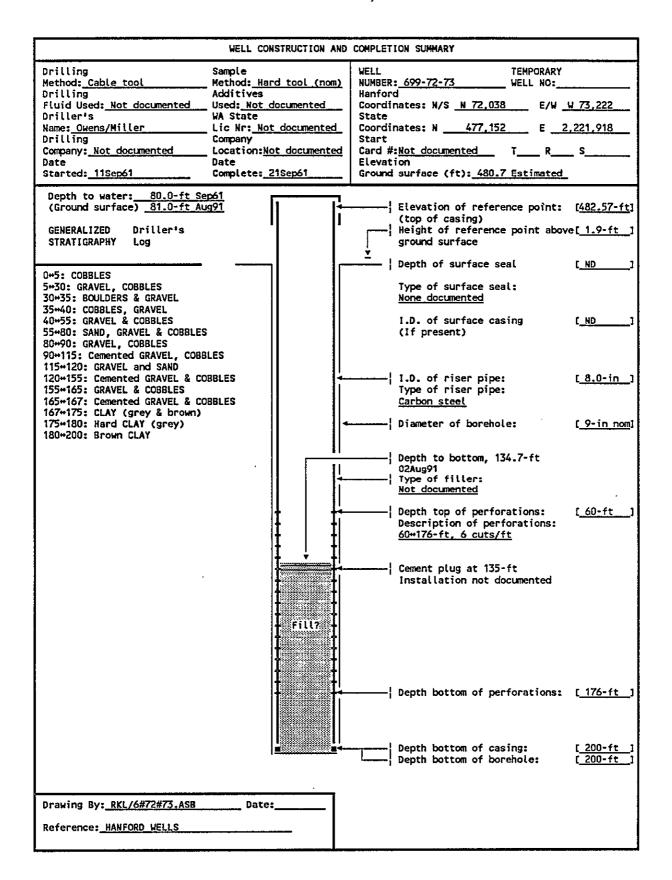
DATE EVALUATED EVAL RECOMMENDATION :

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Sampled 1989 for ³H, U, ¹²⁹I, NO₃; water levels measured 05Nov62+11Jun91 LISTED USE

Electric submersible, intake set at 89.5-ft (top-of-casing). PUMP TYPE

Odjun91; Pulled pump. No contamination encountered. 10Jun91; TV run. 02Aug91; Installed electric submersible pump. MAINTENANCE



SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-72-73

699-72-73 WELL DESIGNATION

CERCLA UNIT 100-BC-5 Background

RCRA FACILITY NA

N 72,038 W 73,222 N 477,152 E 2,221,918 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Sep61 200-ft

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 134.7-ft 02Aug91 80.0-ft, Sep61; 81.0-ft, 02Aug91 DEPTH TO WATER (GS) :

8-in, from +1.9+200-ft CASING DIAMETER

ELEV TOP CASING (ft): 482.57-ft

480.7-ft Estimated ELEV GROUND SURFACE : PERFORATED INTERVAL : 60+176-ft

SCREENED INTERVAL

FIELD INSPECTION, 26Feb91, COMMENTS

Carbon steel, pump hanger hole, no pad, no posts. Capped and locked.

No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS Driller

TV SCAN COMMENTS

10Jun91, depths referenced to ground surface; Depth to bottom: 134.2-ft, silty. Depth to water: 80.7-ft, some floating debris. Water clear, no dislodged scale, some suspended debris. The water was murky toward the bottom.

Vadose and submerged casing light corrosion/rust/scale.

Perforations start at 60-ft to not determined, 4 cuts/rd/ft. The well is in pretty

good shape. It is questionable whether it needs cleaning, .. don't think so.

DATE EVALUATED

EVAL RECOMMENDATION:

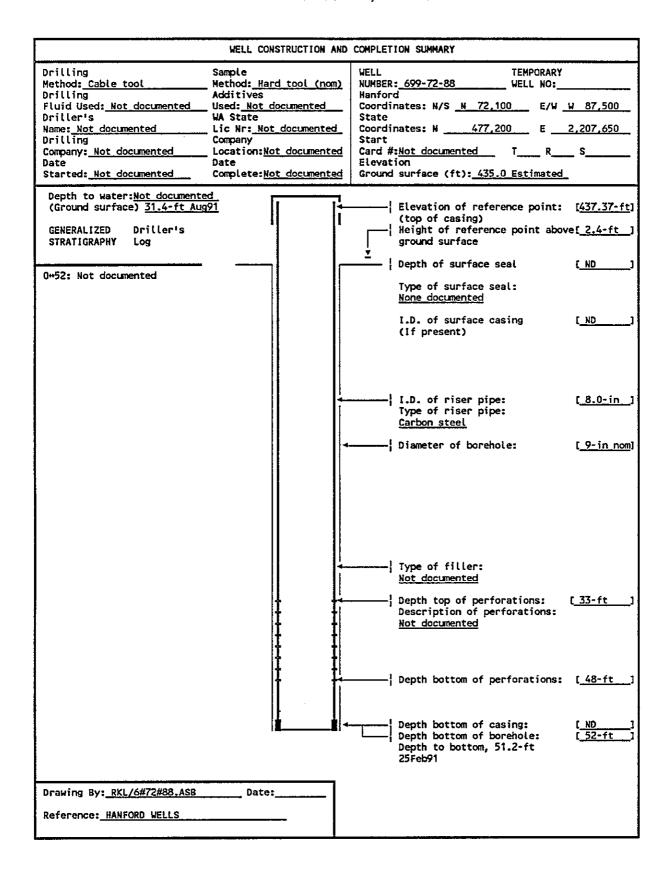
LISTED USE

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Sampled 1989 for $^{3}\mathrm{H}$, $^{129}\mathrm{I}$, $^{103}\mathrm{J}$; water levels measured 04Dec61*11Jun91

Electric submersible, intake set at 99.1-ft, (top-of-casing) PUMP TYPE

06Jun91; Pulled pump. No contamination encountered. 10Jun91; TV run. 02Aug91; Installed electric submersible pump. MAINTENANCE



SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-72-88

699-72-88 WELL DESIGNATION

100-BC-5 Background CERCLA UNIT

RCRA FACILITY NA

HANFORD COORDINATES : 72,100 W 87,500 N LAMBERT COORDINATES : 477,200 E 2,207,650 DATE DRILLED ND

DEPTH DRILLED (GS) : 52-ft

51.1-ft, 02Aug91 31.4-ft, 02Aug91 8-in , from +2.4+ND-ft 437.37-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : CASING DIAMETER ELEV TOP CASING

435.0-ft Estimated ELEV GROUND SURFACE : PERFORATED INTERVAL : 33+48-ft

SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 25Feb91,

Carbon steel, pump hanger hole, no pad, no posts. Capped and locked.

No permanent identification. Not in a radiation zone.

AVAILABLE LOGS None

21Jun91, depths referenced to ground surface; TV SCAN COMMENTS

Depth to bottom: 50.8-ft, sandy.

Depth to water: 30.2-ft, some floating debris. Water clear.

Vadose casing clean; submerged casing very light corrosion/scale/rust. Perforations start at 32.5-ft to not determined, 4 cuts/rd/ft. At 3.6-ft it looked like there was a liner inside the 8-in casing, couldn't tell what size. At 23.6-ft there was what appeared to be another step-down in size of the casing. Couldn't tell what size it was. Well doesn't need cleaning.

DATE EVALUATED NA

EVAL RECOMMENDATION : NA

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LISTED USE

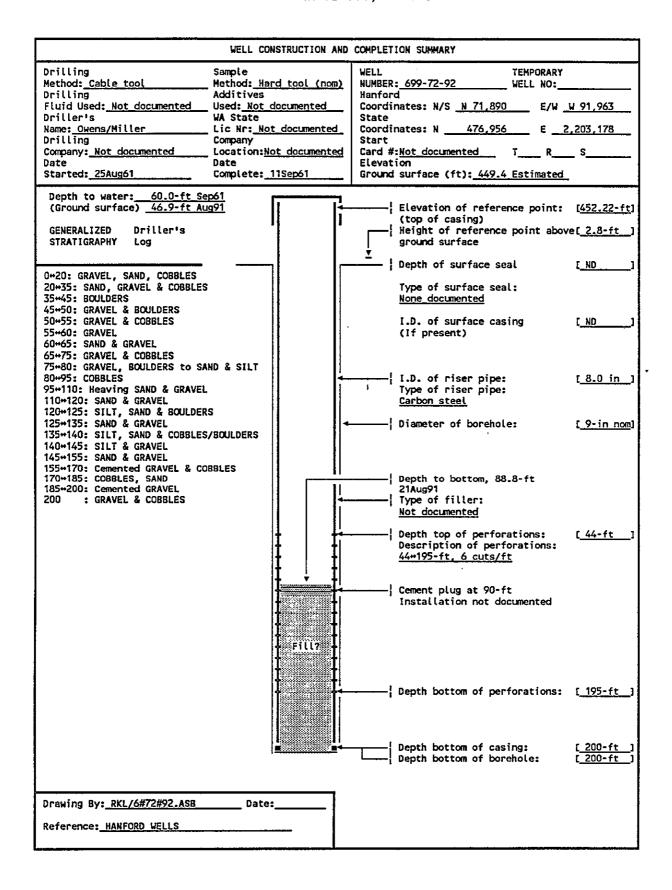
Sampled 1989 for ³H, NO₃,; water levels measured 20May53*11Jun91

Electric submersible, intake set at 47.3-ft (top-of-casing). PUMP TYPE

. MAINTENANCE 31May91; Pulled pump. No contamination encountered.

21Jun91; TV run. 02Aug91; Installed electric submersible pump.

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-72-92

WELL DESIGNATION 699-72-92 100-BC-5 Background CERCLA UNIT RCRA FACILITY NA HANFORD COORDINATES : N 71,890 W 91,963 LAMBERT COORDINATES : N 476,956 E 2,203,178 DATE DRILLED Aug+Sep61 DEPTH DRILLED (GS) : 200-ft MEASURED DEPTH (GS) : 88.8-ft, 21Aug91 60.0-ft, Sep61; 46.9-ft, 21Aug91 DEPTH TO WATER (GS) : 8-in, from +2.8+200-ft 452.22-ft CASING DIAMETER

ELEV GROUND SURFACE : 449.4-ft Estimated PERFORATED INTERVAL : 44+195-ft

SCREENED INTERVAL NA

ELEV TOP CASING

COMMENTS FIELD INSPECTION, 25Feb91,

Carbon steel casing, pump hanger hole, no pad, no posts. Capped and locked.

No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS None

TV SCAN COMMENTS 21Jun91, depths referenced to ground surface;

Depth to bottom: 88.2-ft, sand and gravel.
Depth to water: 44.6-ft, some floating debris. Water clear, some dislodged scale.

Vadose casing clean; submerged casing light corrosion/scale/rust.

Perforations start at 44.0-ft to not determined. Most of the perfs were visible below water. It is questionable whether the well should be cleaned.

20Aug91;

Depth to bottom: 89.6-ft, sandy.

Depth to water: 47.6-ft, surface clean. Water clear.

Vadose casing clean; submerged casing clean.

Perforations start at 44.6-ft to 88.9-ft, 4 cuts/rd/ft. This well is in very good shape.

DATE EVALUATED EVAL RECOMMENDATION :

CX

LISTED USE

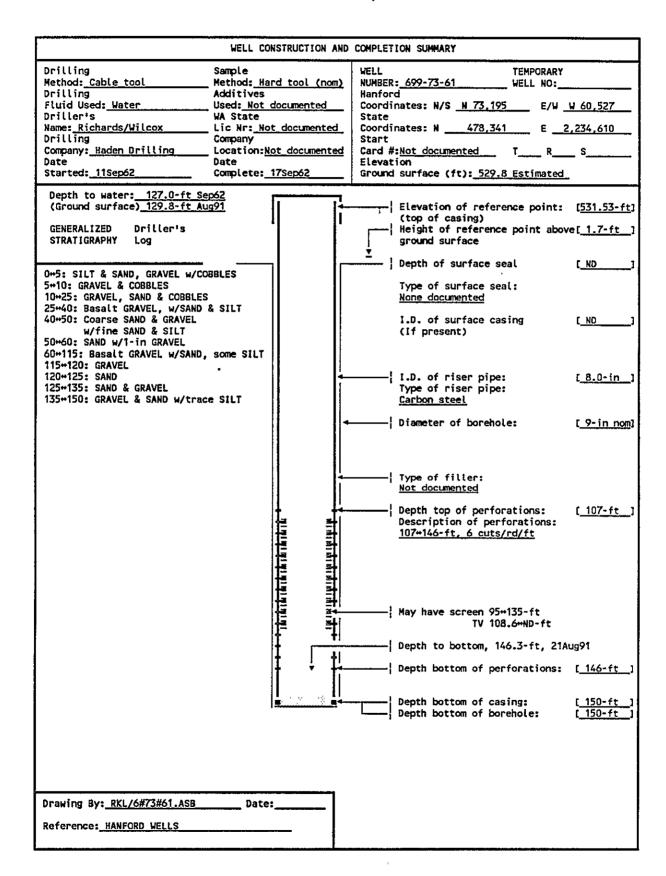
Sampled 1989 for ³H, NO₂, water levels measured, 198ep91+11Jun91 Electric submersible, intake set at 54.9-ft, (top-of-casing). PUMP TYPE

31May91; Pulled pump. No contamination encountered. 21Jun91; TV run. MAINTENANCE

14Aug91; Brushed casing and bailed debris. No contamination encountered.

19Aug91; Developed well to <5 NTU. 20Aug91; TV run.

21Aug91; Installed electric submersible pump.



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-73-61

699-73-61 WELL DESIGNATION

100-KR-4 Background CERCLA UNIT :

RCRA FACILITY NA

N 73,195 W 60,527 N 478,341 E 2,234,610 HANFORD COORDINATES : LAMBERT COORDINATES :

Sep62 DATE DRILLED DEPTH DRILLED (GS) : 150-ft

146.3-ft, 21Aug91 127.0-ft, Sep62; 129.8-ft 21Aug91 8-in, +1.7*150-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : CASING DIAMETER

ELEV TOP CASING 531.53-ft

529.8-ft Estimated ELEV GROUND SURFACE :

PERFORATED INTERVAL : 107+146-ft

SCREENED INTERVAL May have screen 95+135-ft? TV 108.6-ft to not determined FIELD INSPECTION, 26Feb91, COMMENTS

Carbon steel, pump hanger holes, no pad, no posts. Capped and locked. No permanent identification.

Not in radiation zone.

OTHER: Driller AVAILABLE LOGS

TV SCAN COMMENTS 08Aug91;

Depth to bottom: 145.7-ft, sandy.
Depth to water: 129.6-ft, some floating debris. Water clear, some suspended debris.

Vadose casing clean; submerged casing clean. No perforations.

Continous wrap screen, 108.6-ft to not determined. Screen was clean.

This well was in good shape. It doesn't need cleaning.

DATE EVALUATED NA **EVAL RECOMMENDATION:** NA

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Sampled 1989 for ³H, U, ¹²⁹I, NO₃, water level measured 190ct62+11Jun91 LISTED USE

Electric submersible, intake set at 143.6-ft, (top-of-casing). PUMP TYPE

O6Aug91; Pulled pump. No contamination encountered. O8Aug91; TV run. MAINTENANCE

21Aug91; Installed electric submersible pump.

WELL CONSTRUCTION AND COMPLETION SUMMARY				
Drilling Method: Cable tool	Sample Method: <u>Hard tool (nom)</u>	WELL TEMPORARY NUMBER: 699-77-54 WELL NO:		
Drilling Fluid Used: <u>Water</u>	Additives Used: Bentonite	Hanford Coordinates: N/S N 76,700 E/W W 54	.100	
Driller's Name: <u>Hatch</u>	WA State Lic Nr: Not documented	State Coordinates: N	.028	
Drilling Company: <u>Hatch Drilling Co.</u> Date	Company Location: Pasco, WA Date	Card #:Hot documented T R S Elevation	· · ·	
Started: 06May57	Complete: 24May57	Ground surface (ft): 479.2 Estimated		
Depth to water: 80.0-ft Ma (Ground surface) 81.7-ft Se GENERALIZED Driller's STRATIGRAPHY Log	y57 p91	Elevation of reference point: [46 (top of casing) Height of reference point above[ground surface]		
0+15: COBBLES & BOULDERS (Large BOULDER at 8 ft) 15+25: COBBLES & GRAVEL	11 11	Type of surface seal:		
25-35: loose GRAVEL (Added bentonite) 35-40: GRAVEL 40-41: GRAVEL - SILT streaks 41-50: GRAVEL & COBBLES 50-60: GRAVEL (Added bentonite) 60-75: loose GRAVEL (Added bentonite) (Possible perched water - 62 ft) 75-80: Loose GRAVEL & SAND 80-90: Loose fine GRAVEL 90-95: GRAVEL - SAND		<pre>I.D. of surface casing [_! (If present)</pre>	<u>I</u>]	
		I.D. of riser pipe: [1] Type of riser pipe: Carbon steel	<u>3.0-in</u>]	
95*105: Cemented GRAVEL 105*115: Cemented GRAVEL & SA 115*118: Packed SAND & GRAVEL 118*130: Heaving SAND w/GRAVEL 130*135: SAND & small GRAVEL 135*145: SAND - small GRAVEL (Added bentonite)	L		9-in nom]	
145+150: GRAVEL - SAND 150+152: Clean GRAVEL 152 : Brown CLAY		Type of filler: Not documented Depth top of perforations:	70-ft 1	
REMEDIATION:		Description of perforations: 70*120-ft, 6 cuts/ft		
Apr 80, by Bultena, Set cement plug to 117-ft		Depth to bottom, 116.0-ft 16Sep91		
	l i t i	Cement plug at 117-ft		
	FILL?	Depth bottom of perforations: [_	<u>120-ft</u>]	
		Depth bottom of casing:	<u>150-ft</u>]	
	***************************************		<u>152-ft</u>]	
Drawing By: RKL/6#77#54.ASB	Date:			
Reference: HANFORD WELLS				

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-77-54

WELL DESIGNATION 699-77-54

CERCLA UNIT 100-KR-4 Background RCRA FACILITY NA 76,700 W 54,100 481,863 E 2,241,028 HANFORD COORDINATES : LAMBERT COORDINATES : N

DATE DRILLED May57 DEPTH DRILLED (GS) : 152-ft

116.0-ft, 16Sep91 80.0-ft, May57; 81.7-ft, 16Sep91 8-in, from +1.4*150-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : CASING DIAMETER

ELEV TOP CASING 480.59-ft

ELEV GROUND SURFACE : 479.2-ft Estimated

PERFORATED INTERVAL : 70+120-ft

SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 26Feb91,

Carbon steel, pump hanger hole, no pad, no posts. Capped and Locked. No permanent identification.

Not in radiation zone.

OTHER:

None AVAILABLE LOGS 08Aug91; TV SCAN COMMENTS

Depth to bottom: 115.2-ft, sandy.

Depth to water: 81.4-ft, some floating debris. Water clear with some dislodged scale and suspended debris.

Vadose casing some corrosion/scale/rust;

submerged casing, light to heavy corrosion/scale/rust.

Perforations start at 62.6-ft to not determined at 6 cts/ft/rd. Perforations clean and open above water, some open below water.

The well needs cleaning.

13Sep91;

Depth to bottom: 115.5-ft, sandy.

Depth to water: 81.4-ft, some floating debris. Water clear.

Vadose casing clean, some pitting just above water; submerged casing clean.

Perforations start at 60.0-ft to not determined, 4 cuts/rd/ft.

They are open and clear. DATE EVALUATED NA

EVAL RECOMMENDATION :

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NA

Sampled 1989 for 3H, NO3, LISTED USE

water level measured 07Jun57+14Jun91

Electric submersible, intake set at 89.2-ft (top-of-casing). PUMP TYPE

06Aug91; Pulled pump. No contamination encountered. MAINTENANCE

08Aug91; TV run.

26Aug91; Brushed casing and bailed debris. No contamination encountered. 09Sep91; Developed well to <5 NTU.

13Sep91; TV run. 16Sep91; Installed electric submersible pump.

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-78-62

699-78-62 WELL DESIGNATION 100-KR-4 Background CERCLA UNIT RCRA FACILITY NA

N 77,750 W 62,300 N 482,900 E 2,233,000 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Apr+Hay57 DEPTH DRILLED (GS) : 152-ft

106.3-ft, 16Sep91 63.0-ft, May57; 71.8-ft, 16Sep91 8-in, +1.9-134-ft MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : CASING DIAMETER

ELEV TOP CASING 469.88-ft ELEV GROUND SURFACE : 468.0-ft Estimated PERFORATED INTERVAL : 70+120-ft

SCREENED INTERVAL

67.5+107.5-ft, #15 galvanized COMMENTS FIELD INSPECTION, 26Feb91, Carbon steel, pump hanger hole, no pad, no posts. Capped and locked.

No permanent identification. Not in radiation zone.

OTHER: None

AVAILABLE LOGS 08Aug91: TV SCAN COMMENTS

Depth to bottom: 101.0-ft, sandy. Depth to water: 71.5-ft, some floating debris.

Water clear with some suspended debris.

Vadose casing some corrosion/scale/rust near top of screen;

submerged casing clean. Continous wrap screen at 69.9-ft to not determined. The top 0.5-ft of screen looks bent or driven on, it is not breached.

The well needs cleaning.

13Sep91;

Depth to bottom: 106.0-ft, sandy.

Depth to water: 71.8-ft, some floating debris. Water clear with some suspended debris.

Vadose casing clean, some pitting 55-ft to water: submerged casing clean. Perforations start at 66.6-ft

to top of screen, 4 cuts/rd/ft. Continous wrap screen, 69.9+106.0-ft, screen was clean.

DATE EVALUATED NA EVAL RECOMMENDATION : NA

LISTED USE

Sampled 1989 for NO₃, water level measured 07Jun57+14Jun91

PUMP TYPE Electric submersible, intake set at 83.0-ft, (top-of-casing).

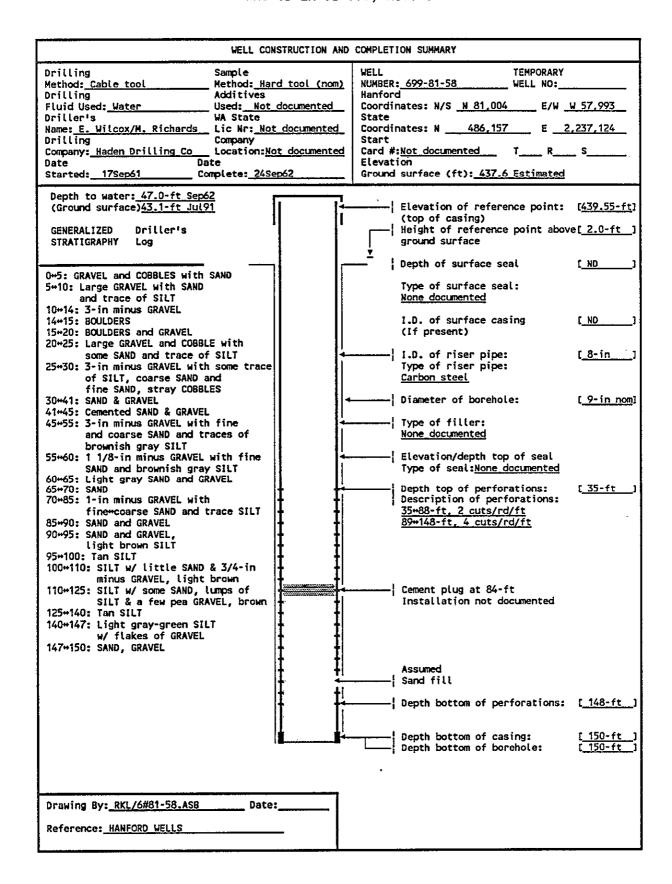
MAINTENANCE 06Aug91; Removed pump. No contamination encountered.

08Aug91; TV run.

28Aug91; Brushed casing and screen and bailed debris. No contamination encountered.

10Sep91; Developed well to <5 NTU. 13Sep91; TV run.

16Sep91; Installed electric submersible pump.



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-81-58

WELL DESIGNATION 699-81-58

CERCLA UNIT 100-Aggregate Area 1324-N/NA, 1325-N N 81,004 W 57,993 N 486,157 E 2,237,124 RCRA FACILITY HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Oct62 DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 150-ft

DEPTH TO WATER (GS) :

47.0-ft, Sep62; 43.1-ft, 30Jul91 8-in carbon steel, +2.0+150-ft CASING DIAMETER

ELEV TOP CASING 439155-ft ELEV GROUND SURFACE : 437.6-ft, Estimated

35+148-ft PERFORATED INTERVAL :

SCREENED INTERVAL

FIELD INSPECTION, 30Aug89 Carbon steel casing. COMMENTS

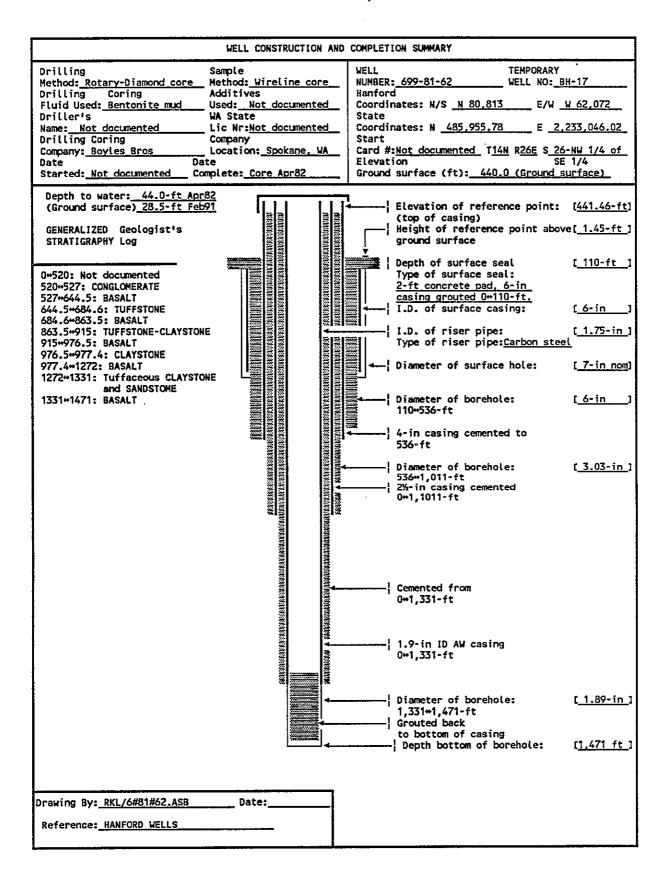
No pad, No posts, capped and locked. No permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA **EVAL RECOMMENDATION:** NA

LISTED USE Water levels measured 190ct62+30Jul91

PUMP TYPE Electric submersible

MAINTENANCE 10+11Apr80; Brushed casing to plug at 84-ft and bailed debris



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-81-62

699-81-62 WELL DESIGNATION

CERCLA UNIT 100-KR-4 Background :

RCRA FACILITY HA

N 80,813 W 62,072 N 485,955.78 E 2,233,046.02 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Core-Apr82 DEPTH DRILLED (GS) : 1,471-ft

MEASURED DEPTH (GS) :

44.0-ft, Apr82; 28.5-ft, 27Feb91 1.9-in, +1.5.8-1,331-ft DEPTH TO WATER (GS) :

CASING DIAMETER

ELEV TOP CASING 441.46-ft

ELEV GROUND SURFACE : 440.0-ft Estimated

PERFORATED INTERVAL : NA

SCREENED INTERVAL :

COMMENTS

FIELD INSPECTION, 27Feb91, Carbon steel, round cement pad, no posts.

Capped and locked.

No permanent identification. Not in radiation zone.

OTHER:

AVAILABLE LOGS Geologist

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

Not sampled 1989 LISTED USE

water level measured 20Jun90

PUMP TYPE None ND MAINTENANCE

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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-89-35

699-89-35 WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 88,767 W 35,221 N 493,978 E 2,259,876 HANFORD COORDINATES : LAMBERT COORDINATES :

Sep61 DATE DRILLED DEPTH DRILLED (GS) : 73.0-ft ND

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) :

27.0-ft, Oct62; 22.5-ft, Jul91; 8-in carbon steel, from +1.9+75-ft CASING DIAMETER ELEV TOP CASING 397.46-ft

ELEV GROUND SURFACE: 395.6-ft, Estimated

PERFORATED INTERVAL : 20+73-ft SCREENED INTERVAL HA

COMMENTS FIELD INSPECTION, 14Jun90,

Carbon steel casing.

No pad, No posts, capped and locked.

No permanent identification.

AVAILABLE LOGS Driller

TV SCAN COMMENTS NA DATE EVALUATED NA EVAL RECOMMENDATION : NA

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(.! 13 LISTED USE Water levels measured 04Dec61+26Jul91

PUMP TYPE None documented

MAINTENANCE



WELL CONSTRUCTION AND COMPLETION SUMMARY		
	t documented	WELL TEMPORARY NUMBER: 699-90-45 WELL NO:
Drilling Additives Fluid Used: Not documented Used: No	t documented_	Hanford Coordinates: N/S <u>N 89,626</u> E/W <u>W 45,276</u>
Driller's WA State		State
	t documented	Coordinates: N <u>494,811</u> E <u>2,249,819</u> Start
Drilling Company Company: Not documented Location:	Not documented	Card #:Not documented T R S
Date Date		Elevation
Started: Not documented Complete: Not	documented	Ground surface (ft): 421.3 Estimated
Depth to water: <u>38.0-ft 1986</u> (Top casing) <u>37.1-ft Jul91</u>		Elevation of reference point: [422.15-ft (top of casing)
GENERALIZED Driller's STRATIGRAPHY Log		Height of reference point above[0.9-ft ground surface
None available		Depth of surface seal [ND
Note Statement	קור ולי	Type of surface seal: 8-in gal. casing
		I.D. of surface casing [NO] I.D. of riser pipe: [6-in] Type of riser pipe: Carbon steel
REMEDIATION:		Diameter of borehole: [_7-in_non
1986, by Ludtke Added 1 gallon bleach		Type of filler: None documented
·	4	Type of seal:None documented
	M M M M M M M M M M M M M M M M M M M	Perforated 37~42-ft
1	1 1	•
	#1.#1.#1.#1.#1.#1.#1.#1.#1.#1.#1.#1.#1.#	Telescoping screen 32-42-ft, 20-slot with neoprene packer
		Depth bottom of casing: [ND pepth bottom of borehole [42-ft]
Drawing By: RKL/6#69-45.ASB Dat	· ·	
Reference: HANFORD WELLS		

SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-90-45

WELL DESIGNATION 699-90-45

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 89,626 W 45,276 N 494,811 E 2,249,819 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED ND

42.0-ft ND

DEPTH DRILLED (GS):
MEASURED DEPTH (GS):
DEPTH TO WATER (GS): 30.0-ft, 1986;

37.1-ft, Jul91

8-in galvanized, CASING DIAMETER depth not documented

6-in carbon steel, +0.9-ND-ft

ELEV TOP CASING

422.15-ft 421.3-ft, Estimated 37+42-ft ELEV GROUND SURFACE : PERFORATED INTERVAL :

Telescoping, 32-42-ft, #20-slot, neoprene packer FIELD INSPECTION, 07Jun90, SCREENED INTERVAL

COMMENTS Carbon steel casing.

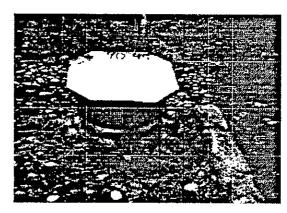
No pad, No posts, capped and locked. No permanent identification.

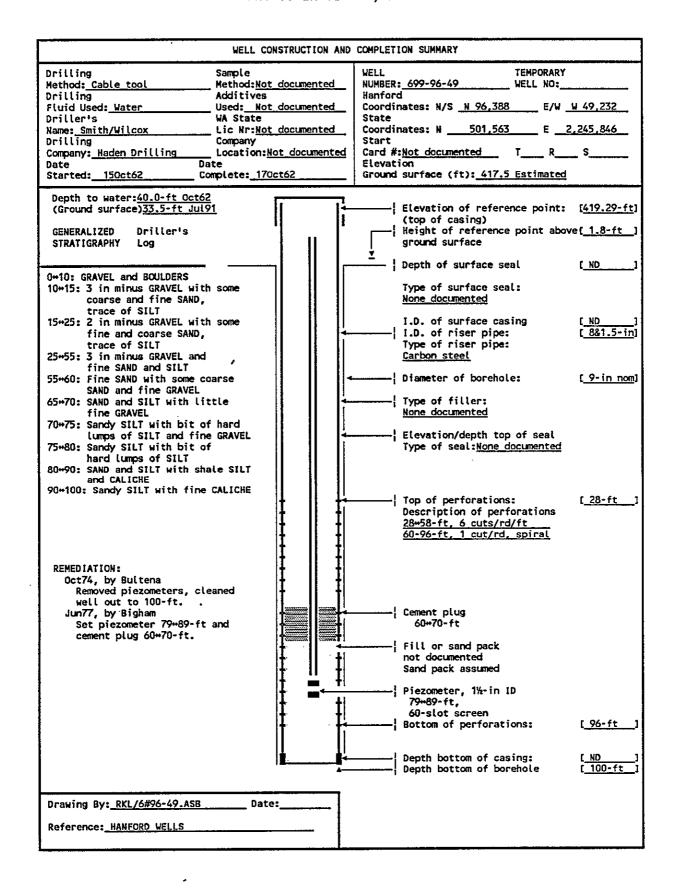
AVAILABLE LOGS None TV SCAN COMMENTS NA DATE EVALUATED NA - EVAL RECOMMENDATION : NA

LISTED USE Water levels measured 11Dec61+26Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND





SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-96-49

699-96-49 WELL DESIGNATION

CERCLA UNIT RCRA FACILITY 100-Aggregate Area

NA

N 96,388 W 48,232 N 501,563 E 2,245,846 HANFORD COORDINATES : LAMBERT COORDINATES :

DATE DRILLED Oct62 DEPTH DRILLED (GS) : 100-ft ND

MEASURED DEPTH (GS) : DEPTH TO WATER (GS) : 40.0-ft, Oct62; 33.5-ft, 29Jul91 8-in carbon steel, +1.8+ND (~100-ft) CASING DIAMETER

419.29-ft

ELEV TOP CASING : ELEV GROUND SURFACE : 417.5-ft, Estimated 28+58-ft and 60+96-ft PERFORATED INTERVAL :

Piezometer, 1-1/2in, 79+89-ft, 60-slot FIELD INSPECTION, 07Jun90, SCREENED INTERVAL

COMMENTS

Carbon steel casing.

No pad, No posts, capped and locked. No permanent identification.

AVAILABLE LOGS Driller

TV SCAN COMMENTS КA DATE EVALUATED NA EVAL RECOMMENDATION :

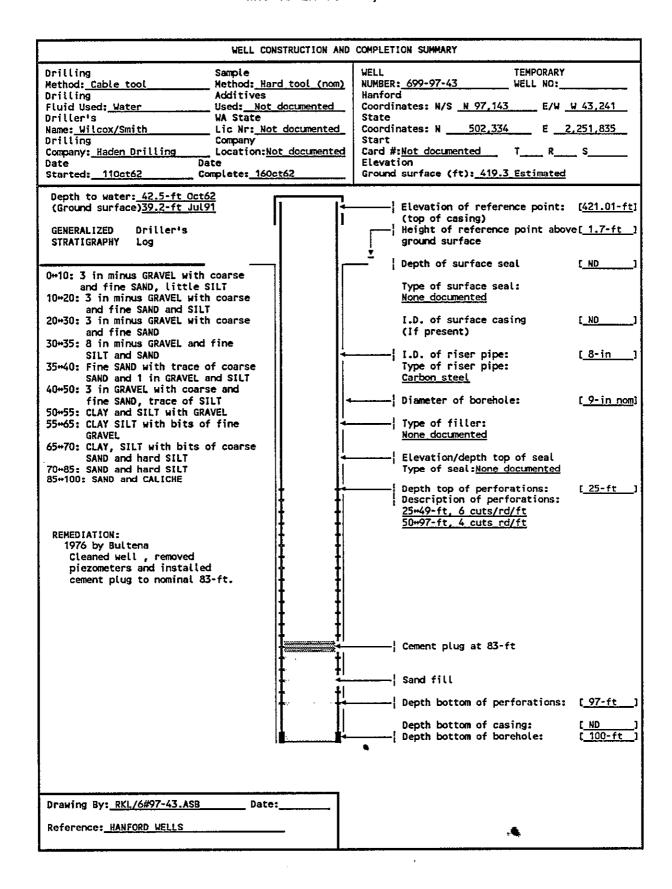
LISTED USE Water levels measured 220ct62+29Jul91

PUMP TYPE Electric submersible

MAINTENANCE



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SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-97-43

WELL DESIGNATION 699-97-43

CERCLA UNIT 100-Aggregate Area RCRA FACILITY HANFORD COORDINATES : LAMBERT COORDINATES : N 97,143 W 43,241 N 502,334 E 2,251,835

0ct62 DATE DRILLED DEPTH DRILLED 100-ft MEASURED DEPTH (GS) : ND

42.5-ft, Oct62; 39.2-ft, Jul91 DEPTH TO WATER (GS) : 8-in carbon steel, +1.7-ND CASING DIAMETER

ELEV TOP CASING 421.01-ft

419.3-ft, Estimated 25+97-ft ELEV GROUND SURFACE :

PERFORATED INTERVAL : NA

SCREENED INTERVAL

FIELD INSPECTION, 07Jun90, COMMENTS

Carbon steel casing.

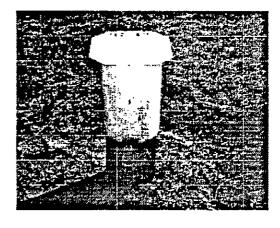
No pad, No posts, capped and locked. No permanent identification. Driller

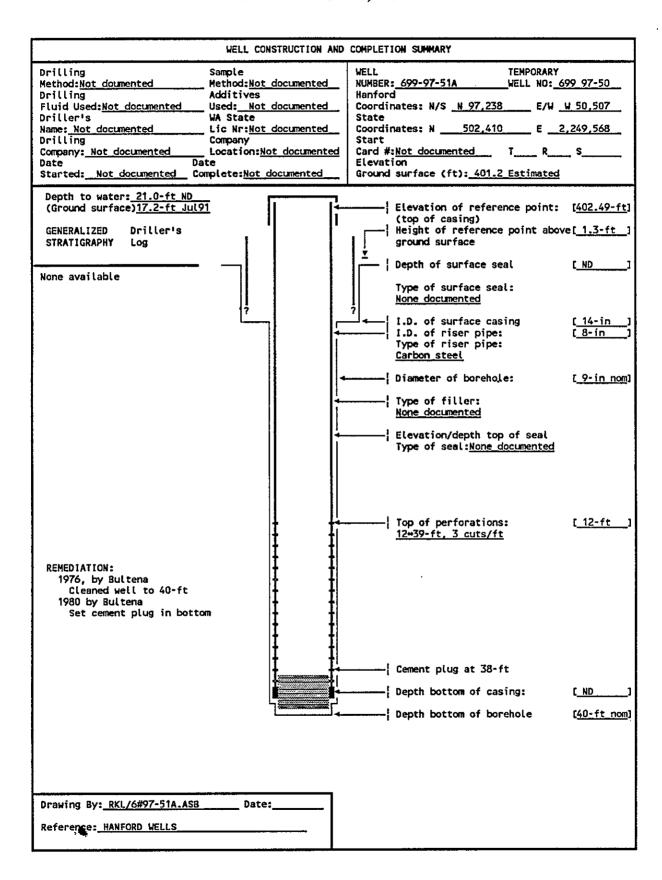
AVAILABLE LOGS TV SCAN COMMENTS NA DATE EVALUATED HA NA EVAL RECOMMENDATION :

Water levels measured 220ct62+29Jul91 LISTED USE

PUMP TYPE Electric submersible

MAINTENANCE ND





SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-97-51A

699-97-51A WELL DESIGNATION

CERCLA UNIT 100-Aggregate Area

RCRA FACILITY NA

N 97,238 W 50,507 HANFORD COORDINATES : LAMBERT COORDINATES : N 502,410 E 2,249,568

ND ~40-ft DATE DRILLED DEPTH DRILLED (GS) :

MEASURED DEPTH (GS) :

21.0-ft, ND; 17.2-ft, Jul91 8-in carbon steel, +1.3-ND 14-in carbon steel, ~1-ft+ND DEPTH TO WATER (GS) : CASING DIAMETER

ELEV TOP CASING 402.49-ft

401.2-ft Estimated 12+39-ft ELEV GROUND SURFACE :

PERFORATED INTERVAL :

SCREENED INTERVAL NA

COMMENTS FIELD INSPECTION, 07Jun90,

Carbon steel casing.

No pad, No posts, capped and locked.

No permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA

DATE EVALUATED NA EVAL RECOMMENDATION : NA

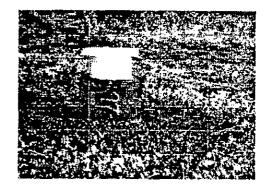
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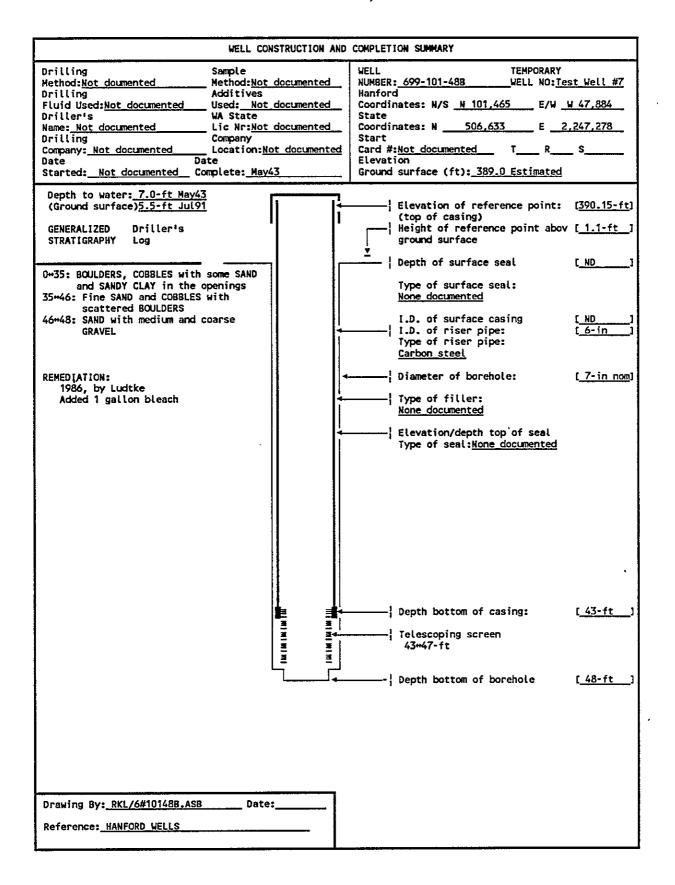
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LISTED USE Water levels measured 07Jan63+29Jul91

PUMP TYPE Electric submersible

MAINTENANCE ND





SUMMARY OF CONSTRUCTION DATA AND FIELD OBSERVATIONS RESOURCE PROTECTION WELL - 699-101-48B

WELL DESIGNATION 699-101-48B CERCLA UNIT 100-Aggregate Area RCRA FACILITY NA HANFORD COORDINATES : LAMBERT COORDINATES : N 101,465 W 47,884 N 506,633 E 2,247,278 DATE DRILLED May43

DEPTH DRILLED (GS) : MEASURED DEPTH (GS) : 48.0-ft ND

DEPTH TO WATER (GS) : 7.0-ft, May43; 5.5-ft, Jul91 CASING DIAMETER 6-in carbon steel, +1.1+43-ft ELEV TOP CASING 390.15-ft

ELEV GROUND SURFACE : PERFORATED INTERVAL : SCREENED INTERVAL : COMMENTS

389.0-ft, Estimated NA Telescoping, 43-47-ft FIELD INSPECTION, 07Jun90, Carbon steel casing.

No pad, No posts, capped and locked. No permanent identification.

AVAILABLE LOGS Driller TV SCAN COMMENTS NA DATE EVALUATED NA **EVAL RECOMMENDATION:** NA LISTED USE

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Water levels measured 12Jul73+05Jun91 PUMP TYPE Electric submersible

MAINTENANCE

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